JOURNAL

of the

NATIONAL ASSOCIATION *of* CHIROPODISTS

The Official Publication of the Profession

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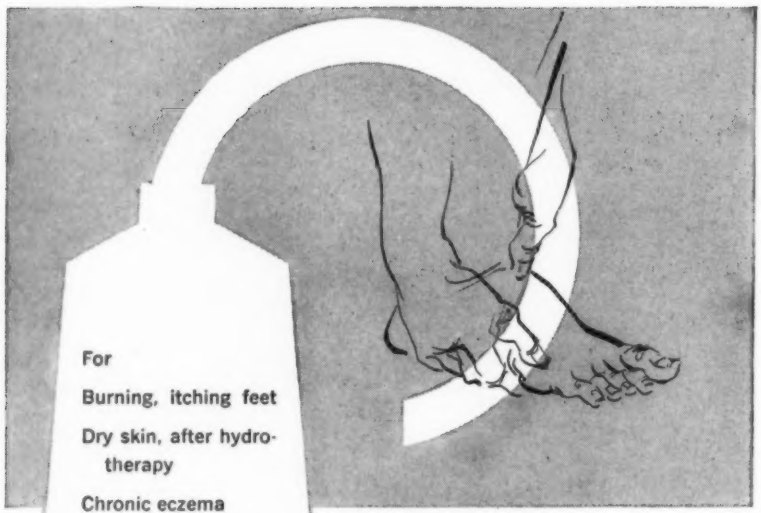
VOLUME 47, NUMBER 2

FEBRUARY, 1957



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A REPORT OF PROGRESS

ON THE

CHIROPODY-INDUSTRY COOPERATION PROGRAM

AS ANNOUNCED IN THE

JANUARY ISSUE OF THE NAC JOURNAL

The program of Chiropodist Support From Industry on the daily public contact level is progressing splendidly. Matters quickly got under way the latter part of January. As the open letter to chiropodists on the following page indicates, there has been widespread response from the profession.

Wholehearted acceptance of the idea, represented by pledges of a *"Declaration of Co-operation With Chiropody"* are coming in every mail from the more than 2000 Foot-So-Port Shoe Stores who have received our Special Information Report on this program. This eight page report covered the following:

(1) Outline of the aims, purposes and importance of the American Foot Health Foundation in the field of the human foot.

(2) Presentation of a frank appraisal of past problems in relationships between the professional foot doctor and the orthopedic shoe manufacturers, their dealers and salesmen.

(3) Presentation of a completely new approach for resolving this problem in the mutual interest of all concerned — and to the end of directly benefitting the public interest on behalf of the doctor within his province and on behalf of the orthopedic fabricator in his.

(4) Recommendations on how each shoe dealer and his salesman (or fitter) can assist chiropody on the local level. (Copies of this report are available upon request.)

REQUESTS FOR INFORMATION

It is suggested to those chiropodists who have not as yet written in for the material which was offered freely, without obligation, in the January announcement, that they do so without delay so they can benefit from this program from the very beginning.

The free foot health pamphlets and booklets offered for distribution through the chiropodist's office are being revised by the American Foot Health Foundation. This literature is being designed and written by professional artists and writers and will not only be an example of ethical writing, but with the powerful impact of public appeal, plus fine typography, paper, format, color, etc.

Please see other side . . .

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An Open Letter
To The Profession
On Chiropody Support
From Industry . . . . . .

Dear Colleagues,

It has been a matter of great satisfaction to this research division to have received the very favorable responses which have come in following the first announcement of this new program in the NAC Journal. Your letters and comments on the value of a collaborative program on the high level represented in this movement are deeply appreciated by the entire staff.

The free information and literature requested is being mailed you. The friendly and courteous letters you have sent will all be answered personally as soon as we can catch up with the unexpected volume of it.

I would like to call your attention at this writing to the offer of free symposiums and exhibits originally mentioned in Items No. 6 and 7 in the January NAC announcement. Requests for providing these exhibits at chiropody conventions should reach us well in advance, months ahead, so we can properly schedule them.

For your information, this Foot and Shoe Research Division is participating this way in the Midwest Chiropody Conference, March 15, 16 and 17 in Chicago. Also, in the Chiropody Science Conclave at Atlantic City in April, 1957, as previously stated. We would like to extend you a cordial invitation to visit us during the exhibitions and to thank you in person for your cooperation in this program.

We have made an excellent start together on what should prove to be a valuable continuing program for organized chiropody. We shall strive to merit your support in the future.

Sincerely,

George J. Deyo, D.S.C.

George J. Deyo, D.S.C.
Professional Relations Director

GJD/et

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Deadline for *Journal* copy is the 10th of the month before publication (example: copy for June issue should be in our hands by May 10th.) The *Journal* is usually mailed between the 10th and 15th of the month noted on the issue (the June issue is mailed between the 10th and 15th of June).

Manuscripts must be typewritten, double spaced, and an original copy must be submitted. References should give name and initials of author, volume, page, month and year of publication in the case of periodicals, and publisher and place and year of publication in the case of books. Illustrations must be clear photographs. Glossy prints are preferred. Drawings must be made in black ink on heavy paper or cardboard. Any illustrations should bear the author's name and be numbered in the order in which they are referred to in the text. Illustrations must not be pasted on the manuscript. Legends should be placed on a separate sheet. Tables are not illustrations and should be numbered separately.

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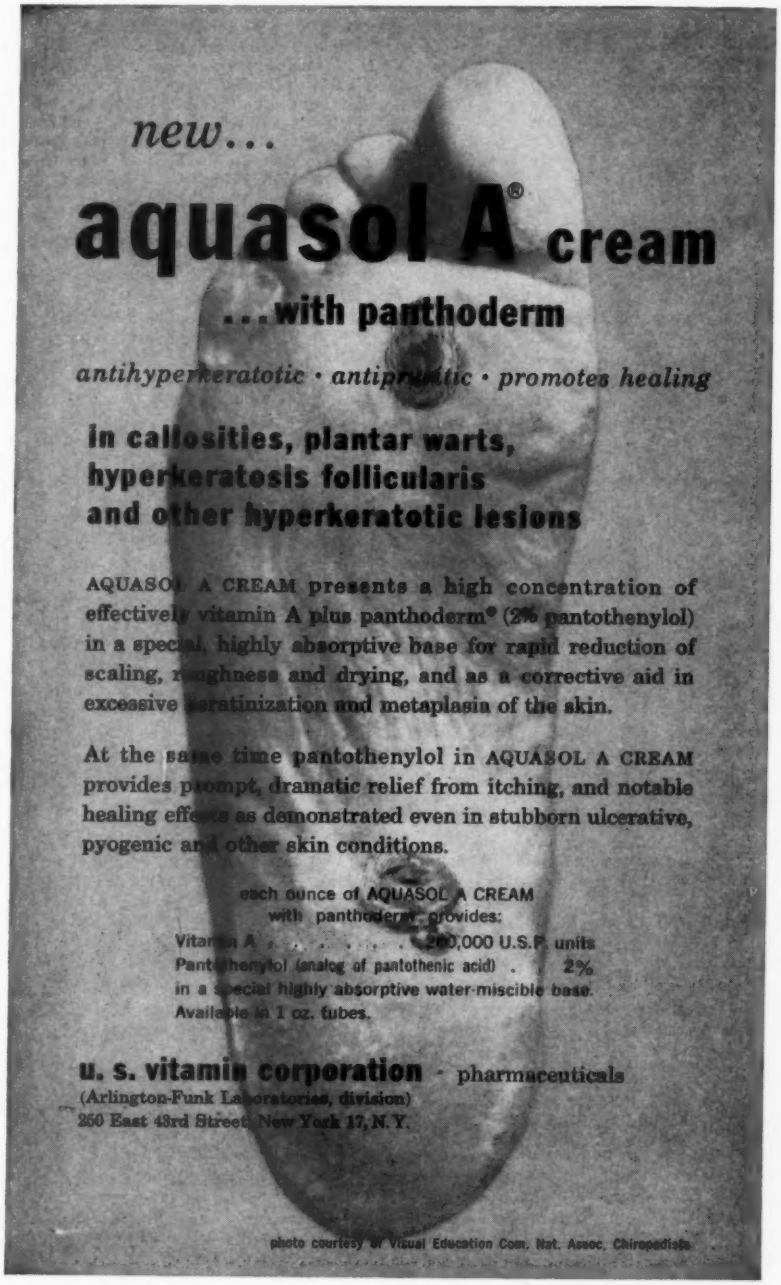
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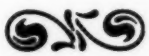

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[1] Ignatoff, W.B.; Journal National Assn. Chiropodists December 1952.

STATE BOARD MEETINGS FOR EXAMINATION AND LICENSURE

Alabama
The Alabama Medical Board of Examiners. **Board Secretary:** Dr. Elizabeth P. Sealy, 34 South Perry Street, Montgomery, Ala.

Arizona
The next meeting of the Arizona State Board of Chiropody Examiners will be held for examination in February, 1957, at 313 West McDowell Road in Phoenix, Arizona. **Board Secretary:** Dr. Julius Citron, 313 W. McDowell Road, Phoenix, Arizona.

California
The California Board of Medical Examiners will hold its next meeting for examination on February 26-27, 1957, at the Biltmore Hotel, 515 So. Olive St., Los Angeles, Calif. **Board Secretary:** Louis E. Jones, M.D., 1020 N Street, Room 530, Sacramento, Calif.

Delaware
The State Board of Chiropody Examiners of Delaware. **Board Secretary:** Dr. Bertram H. Blum, 112 So. State St., Dover, Dela.

District of Columbia
The Board of Podiatry Examiners of the District of Columbia. **Board Secretary:** Dr. Harry L. Hoffman, 1098 National Press Bldg., Washington, D. C.

Florida
The next board meeting of the Florida State Board of Chiropody Examiners will be held for examination on June 8-10, 1957, in Miami, Fla. **Board Secretary:** Dr. Heywood A. Downing, 203 Greenleaf Bldg., Jacksonville, Fla.

Georgia
The Georgia State Board of Chiropody Examiners. **Board President:** Dr Charles W. Beasley, Jr., 1205 First National Bank Bldg., Atlanta, Ga.

Idaho
The next meeting of the Idaho State Board of Chiropody Examiners will be held for reciprocity and examination on July 9-10, 1957, at State Capital Bldg., Boise, Idaho. **Board Secretary:** Dr. Alma N. Miller, 301 Kane Bldg., Pocatello, Idaho.

Iowa
The Iowa State Chiropody Board of Examiners will conduct examinations at the State Office Building in Des Moines, Iowa, on June 10-12, 1957. **Board Secretary:** Dr. C. T. Howard, Lippert Bldg., Boone, Iowa.

Illinois
The next board meeting of the Illinois Chiropody Examining Committee will be held for reciprocity and examination on June 17-19, 1957, at 160 No. LaSalle St., Chicago, Ill. **Superintendent of Registration:** Fredric B. Seicke, Capitol Bldg., Springfield, Ill.

Kansas
The Kansas Board of Podiatry Examiners will hold its next meeting for examination on June 5-6, 1957, at the University of Kansas Medical Center, Kansas City, Kansas. **Board President:** Dr. L. E. Krause, 1107 Williams St., Great Bend, Kansas, or Kansas Board of Podiatry Examiners, 872 New Brotherhood Bldg., Kansas City, Kansas. **Board Secretary:** L. F. Schmaus, M. D., 864 New Brotherhood Bldg., Kansas City, Kansas.

Maine
The Maine Board of Examiners in Chiropody and Podiatry will hold its next meeting on March 12-13, 1957, at the City Building in Portland, Me. **Board Secretary:** Adam P. Leighton, Jr., M.D., 192 State St., Portland, Maine; **Podiatry Examiner:** Dr. Ellsworth C. Reed, 547A Congress St., Portland, Me.

Massachusetts
The next board meeting of the Board of Registration in Chiropody-Podiatry will be held for reciprocity, conditionally, and examination, June and December, at the State House, Boston, Mass. **Board Secretary:** Dr. James F. Dunne, 428 South Street, Hyannis, Mass.

Minnesota
The Minnesota Board of Chiropody Examiners will hold its next meeting on June 20, 1957, at the Minnesota State Capitol in St. Paul, Minn. **Board Secretary:** H. W. Leibold, D.S.C., 221 Hamm Bldg., St. Paul 2, Minn.

Mississippi
The Mississippi State Board of Health. **Board Secretary:** Dr. Felix J. Underwood, Old Capitol, Jackson, Miss.

Missouri
The next board meeting of the Missouri State Board of Chiropody will be held for reciprocity and examination on June 16-17, 1957, at the Jefferson Building in Jefferson City, Mo. **Board Secretary:** Dr. L. A. Hansen, 800 Professional Bldg., Kansas City, Mo.

Nevada
The next board meeting of the Nevada State Chiropody Board will be held for examination on May 6, 1957 at 150 Chestnut Street, Reno, Nevada. **Board Secretary:** Dr. William A. Edwards, 150 Chestnut St., Reno, Nevada.

New Hampshire
The New Hampshire Board of Registration in Chiropody. **Board Secretary:** John S. Wheeler, M.D., 107 State House, Concord, N. H.

New Mexico
The next board meeting of the New Mexico State Board of Chiropody will be held for reciprocity (upon application) and examination on July 13-14, 1957, in Albuquerque, N. M. **Board Secretary:** Morris Haas, D.S.C., 1301 Central Ave., East, Albuquerque, N. M.

North Carolina
The North Carolina State Board of Chiropody Examiners will hold its next meeting for reciprocity and examination in June 1957 at Fayetteville, N. C. **Board Secretary:** Dr. Charles Darby, P. O. Box 55, Statesville, N. C.

North Dakota
The next board meeting of the North Dakota Board of Registration in Chiropody will be held for reciprocity and examination on April 21, 1957, at 611 First Ave., No., Fargo, No. Dak. **Board Secretary:** Dr. E. B. Snuff, 611 First Ave., No., Fargo, No. Dak.

Oklahoma
The Oklahoma State Board of Chiropody. **Board Secretary:** Dr. Warren D. Long, 1217 No. Walker St., Oklahoma City, Okla.

Rhode Island
The next meeting of the Rhode Island Board of Examiners in Chiropody will be held on April 10, 1957 at 366 State Office Building in Providence, R. I. **Administrator:** Thomas B. Casey, 366 State Office Bldg., Providence, R. I.

Tennessee
The Tennessee Board of Registration in Chiropody. Board Secretary: Dr. Arthur Richert, 3355 Poplar St., Memphis, Tenn.

Texas
The Texas State Board of Chiropody Examiners. **Board Secretary:** Dr. Lewis M. Hoppock, P. O. Box 3315, Temple Texas.

Utah
The next board meeting of the Utah State Board of Chiropody Examiners will be held for examination in July 1957 at the State Capitol in Salt Lake City, Utah. **Board Secretary:** Dr. A. Bowden, First Security Bank Bldg., Provo, Utah.

Washington
The next board meeting will be held for examination, July 1957, at U. of W. Medical School, Seattle, Wash. **Board Secretary:** Edw. C. Dohm, Gen. Adm. Bldg., Olympia, Wash.

West Virginia
The next board meeting of the Medical Licensing Board of West Virginia will be held for examination in January 1957 at the State Office Building in Charleston, W. Va. **Board Secretary:** N. H. Dyer, M.D., State Office Building, Charleston, W. Va.

Wyoming
The Wyoming State Board of Registration in Chiropody will hold its next meeting for reciprocity and examination on June 21-22, 1957, at Capitol Bldg., Cheyenne, Wyoming. **Board Secretary:** Dr. Duane NeuSchultz, P. O. Box 1029, Torrington, Wyo.

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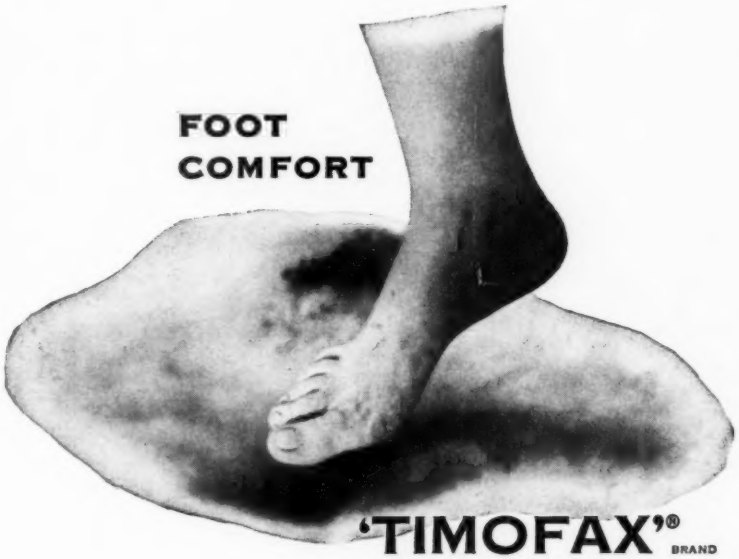

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TENSION TOLERANCE AND ADJUSTMENT MECHANISM

MICHAEL DICKMAN, A.B., A.M., D.S.C.
Orange, N. J.

TO GAIN A CONCEPT of mental health in our complex living of today involves many different meanings or implications at different times. In general one may describe mental health from a negative or a positive viewpoint, with each of these containing symptoms ranging along a continuum, according to its degree of involvement. The negative viewpoint has reference to the absence of symptoms of maladjustment, either mild or severe. The positive viewpoint refers to a satisfactory adjustment and adaptation of the individual to the stresses of group life. According to a report of a White House Conference[1] in its broader aspects mental health may be thought of as "the adjustment of individuals to themselves and the world at large, with a maximum of effectiveness, satisfaction, cheerfulness, and socially considerate behavior, and the ability of facing and accepting the realities of life." There is even a higher degree of mental health which involves, in addition, the experiencing by the individual of the greatest success which his abilities make possible, with a maximum sense of well-being on his own part and the highest possible benefit to society. This type of individual is mature enough to conduct himself in an adaptive fashion under any circumstances.

Mental disease is an abnormality of behavior. Marzolf[2] calls it a "disease of the mind or a derangement or disorder of the mind." There is no evidence that certain mental disorders, i.e., schizophrenia and paranoia, are in a conclusive sense due to organic factors. But we do know that behavior problems can be and are caused by tensions and that they require adjustment mechanisms. It is with this that we are here primarily concerned. The chiropodist is no different from others in this respect. The personality and effectiveness of a chiropodist dealing with people is a vital factor in his success or failure psychologically, socially, economically. It will contribute immeasurably to his status and position in his community and among his peers. It will be the decisive factor in his emotional well-being.

We know that basically man has certain irreducible needs which characterize his behavior. A satisfaction of these needs will give him comfort; a frustration of them will result in tensions. The needs range from fundamental organic to higher psychological. The most primary of these needs are physiological and relate to such things as thirst, hunger, sex stress, physical pain, lack of sleep, excessive heat or cold, etc. For-

tunately we can as a general rule satisfy these.

If we were to place needs on a hierarchic scale we would find that safety needs next emerge. Perhaps the most important consideration here is the environment. People feel ill at ease in unfamiliar surroundings. We do not feel as well able to cope with threatening or destructive forces unless we are on familiar ground. We must protect ourselves from injury. We like best satisfying routines where we will not be subjected to unexpected exertions.

The need that would follow on our scale would now be the love need. The behavior of the human seems to be such that when his physiological and safety needs are satisfied he next seeks the solace of love need gratification. The emergence of the longing for love and affection, that feeling of belonging, the need for a companion, a sweetheart, a friend or a cause, these are the gratifications that keep one from the stresses and tensions of frustrations.

Still a higher order of need in man is the need for personal adequacy, the need for the esteem of others, the need for the self-respect of his colleagues. This may be manifested by a desire for personal achievement, or strength, or perhaps in a demand for recognition and prestige. This generally leads to self-confidence when the need is satisfied; however, a thwarting of it may easily lead to inferiority and frustration and helplessness.

The highest need in our hierarchy might be classed as the self-determination or self-actualization need. Whereas all other needs may be satisfied to some degree it does not follow that the individual will be contented. He may be out of harmony with his environment. He may experience frustrations and unhappiness, perhaps because of lack of opportunity of accomplishing the task, or tasks, in life for which he feels he is (or should be) fitted. We are to some degree perfectionists and where frustrations are involved we may lean too far in that direction. We might want to do more than adequate work, we might want to consummate our hidden cravings and satisfy our innate desires. The musician wants to write or play music, the artist wants to paint, the builder wants to construct, etc.

Whether these needs follow a pattern or not, their potency will vary with the neurotic potential of the individual. They constitute the avenue of tension-tolerance necessary to the achievement of mental health. Maslow[3] has said that "gratification of any need whatsoever, so long as this be a 'true' gratification, i.e., of a basic rather than a neurotic or pseudo need, helps to determine character formation. Furthermore, any true-need-gratification tends toward the improvement, strengthening, and healthy development of the individual. That is, gratification of any basic need, in so far as we can speak of it in isolation, is a move in the healthy direction, away from the neurotc direction."

Perhaps Jung[4] comes closest in his study of human dynamics in his advocacy of "drive" or "success" as the primary motivation in the individual's desire to make progress—or success—of cherished plans. According to him failure to make such progress may lead to "infantile regression" or the disposition to give up the battle for success in favor of the protections of earlier life. Whether Jung is entirely correct, or Adler[5] with his theory of "power" as being the motivating force or an eclectic motivation of these and others, the fact remains that whether or not all of these needs are requisite to life, they are all requisite to complete living—they are all fundamental to optimum mental health.

Tension-tolerance must be developed in everyone who is to achieve good mental health. This can be done by learning that there are some things one can do, and by accepting the fact that one cannot reasonably be expected to be perfect in everything he undertakes. One must realistically see himself in his environment and act accordingly. He must learn to cope with his problems and solve his personal conflicts,

or he will constantly be subjecting his mental functions to a process of self-rectification, or autocorrectivism, similarly as the body mechanism of homeostasis restores the organism to a normal state when various of its functions have been disturbed. A good example of homeostasis is the process of coagulation when bleeding occurs. Autocorrectivism is similar in its action but more insidious. Autocorrectivism is a reinforcing of satisfactions; therefore, it is a process whereby a state of equilibrium is restored when psychological functions have been disturbed by conflict, mental stress, or frustration. It operates to maintain the person's psychological well-being or integrity.

If the individual is not completely effective, he makes some excuse—he rationalizes; if he should fail completely, he may blame someone else—he projects; if he is completely defeated in his aims, he may retreat in a world of fantasy—he regresses; if he cannot at all face his problems, he may become ill enough to take to his bed with symptoms of insomnia, fatigue, appetite loss—he develops neurasthenia.

Actually all human behavior appears to be activated and motivated by the affective and dynamic processes associated with either the fulfillment or frustration of one's basic needs. Even the most intelligent beings in the best environments will face situations which force conflicts and frustrations. The ability of the individual to meet these conflicts will determine how successful he will be in his relations with people and how free he will be from symptoms of personality defects. The question of how many of a person's needs must be satisfied varies with that person. It depends on the extent of his personal wants, his level of aspiration, what his obstacles are, and his environmental associates. There are various mechanisms whereby a person helps himself to adjust to situations difficult to cope with. The principal adjustment mechanisms are classified as 1. forgetting reality, 2. distorting reality, 3. atoning for reality, 4. retreating from reality, and 5. attacking reality.

Forgetting reality may well be called the dream mechanism, or fantasy mechanism. A person may get some substitute satisfaction by daydreaming as a happy retreat from his feelings of inadequacy or insecurity. He may dream that he is a conquering hero in battle, on the athletic field, or elsewhere. Of course, the top sergeant (the bully) apologizes, or the beauty of the campus swoons over him to the regret of the other beautiful coeds. Or he may dream that he is a suffering hero. In this situation the distressed person dreams that he will touch heartstrings of cruel or harsh parents, etc. In these flights of the imagination, unless there is a continual use of this mechanism, the individual can be well soothed and rarely harmed. The danger lies in making a habit of it. Identification is another mechanism whereby a person may forget reality. It is a method by which the person imagines himself to be a Babe Ruth, or a president of the United States, or a famous actor, or a hero (or heroine) of a story book or screen play. In this way the individual can feel some of the importance he ascribes to his superiors. In most cases this is not harmful. However, when a person constantly substitutes identification for reality and the facts of life, this may become evidence of mental ill health and symptomatic of deep frustration.

Distorting reality is the mechanism of rationalization. This, in the mental hygiene context, refers to the tendency of a person to give plausible reasons for his behavior when that behavior is not desirable or is inconsistent. It is an easy way nature gives us to reduce tensions formed from our problems in living in a world where social customs force us to conform to standards of behavior which we frequently fail to do. It is also known as the "alibi" mechanism. A student who fails in school work may say that his teachers are unfair. A doctor who gets a poor result from some medication he has used on a case may say that the

patient has an allergy. Often the individual does not know he is indulging in this blame-escaping process. He is actually justifying himself to seek social approval and he is trying to maintain his status (ego). He is therefore unable to recognize this mechanism in action. Principal ways in which he may use this mechanism are projection, sour grapes and sweet-lemon. Projection is a tendency to blame one's actions on situations or people out of one's control. A football player may limp off the field when he is benched for poor play. A late appointment keeper will blame a faulty alarm clock. A teacher may blame the poor showing of her students on heredity. Sour grapes as a mechanism is the same as it is in the fable. The working man may laugh at the college man for his lack of practical sense. An underprivileged person will talk about money being the root of all evil. These, and similar evasions, are methods by which the individual who is frustrated or unsuccessful may seek relief. It is a tension-reducing mechanism. The sweet-lemon is a sort of pollyanna mechanism by which, when some calamity occurs, the individual thinks it might have been worse, or that the experience was good for him. It is a method of inventing excuses for lack of judgment or bad fortune.

Atoning for reality is a mechanism of compensation. This is a method whereby one tries to atone for deficiencies by making an effort to develop other qualities to compensate for defects, inferiorities and incompetencies. A frail youth unable to participate successfully in athletics may become a superior student. A homely girl may develop a very attractive personality to atone for her lack of good looks. An undersized man or boy may act tough or develop grand airs to compensate for his feelings of cowardice or inferiority. The individual tries to cover up or disguise, by exaggerating what he considers a desirable trait or tendency, his weaknesses or inferiorities. This, generally done in some socially approved manner, may also be done in some socially disapproved fashion which may lead to delinquency and crime. Compensation may take lines of struggling (successfully at times) against a specific line of defeat. Examples are Edison and Beethoven, who excelled in spite of deafness in fields normally requiring acute hearing. Generally, however, the compensation is not so heroic. Overcompensation implies the overdoing of the effort to attain a desired goal. Compensation identification is the method by which a person may identify himself with some group where he can bask in reflected glory. "My club," "My school," "My firm," "I once met John D." Disparaging remarks is another method by which one feels he appears less inferior. In this mechanism of compensation the individual belittles or tears down others in order to feel built-up himself. Malingering is a process whereby one can escape from responsibility, or offer a plausible excuse for failure by creating infirmities, feigning illness or physical disability. This may range from children having stomach aches when their homework is not done to military personnel goldbricking in the wars. Sympathism is the means whereby one tries to avoid a problem by gaining sympathy. When one tells how hard he tries and what bad breaks he gets, the sympathy engendered makes him feel worthwhile. Regression is a mechanism whereby an individual has been so frustrated in his efforts to satisfy his needs and to make adequate adjustments to his environment that he retreats to a more childish level of living. This calls for few demands on him. By this form of less mature living he is able to evade problems. It is a symbolic retreat into a situation with which he was previously able to deal. (Patients who suffer from schizophrenia are characterized by this backward-turning mechanism.) In its milder forms regression can be illustrated by the helplessness displayed by children who feel neglected, or by the tendency of some adults to indulge in such childish actions as temper tantrums, sulking, or cry-

ing. Some people lean on the protection afforded by religion. Compensation, from the standpoint of mental health, can be one of the most valuable of adjustment mechanisms. It may lead to finer achievements and stimulate feelings of adequacy; but when it is used in the form of criticism, malingering, sympathism, or regression then this adjustment mechanism suggests serious maladjustments. Ultimately, mental hospitals will claim some of its users.

Retreating from reality, or functional dissociation, may also be classified as a form of hysteria. It involves, but does not explain, some of the most amazing escapes from emotional conflicts known. This is a mechanism by which the emotionally tense person develops physical symptoms which save him from the need of further action in a situation repugnant to him. This is an autocorrective mechanism and the individual is not even aware of its functioning. A child facing punishment may develop vomiting spells. A women facing complex situations faints, has tremors, becomes nauseated, all without any known organic cause. Thus it becomes evident that from intense emotional conflict, or fear, the individual's physical functions may become involved and even seriously impaired. War neurosis is an example of this, when emotionally unstable soldiers are torn by the conflict of appearing brave and wanting to get home. These individuals may develop functional blindness or deafness. When the cause is removed (in this case the end of the war) the symptoms generally cease and there is no further manifestation. Another form of functional dissociation is shown through the conflict of dual personality. This mechanism develops gradually, moving from simple to extreme cases of demonstration or expression. In the milder forms they may be seen in broken engagements, divorces, or quitting jobs. In more severe forms they are manifested through amnesia, somnambulism, paralysis, mutism, anesthesia, and other hysterical symptoms. There is no personality disintegration, only a temporary domination of behavior by one particular pattern over another. Usually a severe conflict or fear, of childhood origin, is the underlying cause.

Attacking reality, or the mechanism of defiance, is the one that usually leads to delinquency or crime. Actually, the differentiation between delinquency and crime is that of the age of the individual committing the act. Psychologically, however, the offender who is not caught and legally tried for his action is just as defiant as the one who is. Several studies have shown, particularly one by Freeman[6], that juvenile delinquents are as well adjusted as the average person of the same age. Lying and stealing are two of the main forms of conduct by which people try to avoid punishment, hide feelings of inferiority, and improve prestige. Lying is often an outgrowth of the fantasy mechanism and imagination. Stealing is more complicated in origin. Three types of motivation have been suggested[7]. 1. To be on a par with one's group; 2. To gain attention; 3. To secure emotional outlets for conflicts and other adjustment difficulties. All three of these motivations should be considered as defiance mechanisms. Delinquents and criminals appear to have come in contact with environmental pressures more than most people. They become frustrated individuals who try to seek satisfaction for their basic needs in the form of hostile behavior, rather than through the means of other mechanisms. One can thus regard delinquency and crime as an autocorrective tension-reducing mechanism in which the individual attacks reality in a defiant manner.

Other adjustment mechanisms include reaction formation, a mechanism by which the individual does the opposite of what he actually desires most. This may be illustrated by the person who likes expensive clothes, but deliberately walks several blocks out of his way in order not to pass certain shopping stores. Or one who is

preoccupied with sex desires may denounce sex as not interesting him. Perfectionism is a mechanism by which one attempts to escape blame through the means of being perfect in everything he does. Flight into reality is a method whereby a person may engage himself very deeply in his work in order to avoid other pressures. For example, if a man constantly quarrels with his wife he may devote every spare moment to his work in order to have less time to see her, or to see someone else. A spinster may be very active in church work in order to have fewer hours to brood over her lack of dates. Negativism enables a person to be stubborn in refusing to face a problem he doesn't like, or fears to face. Egocentrism is an attempt by someone to gain recognition not through socially accepted ways. A college student may eat live goldfish, or broken phonograph records, or tell silly jokes.

The criteria which a person should employ in evaluating the adjustment mechanisms are:

1. Does the mechanism help him adjust to his original goal, or give him an adequate substitute objective?

2. Does the mechanism aid him in retaining status with his group?

3. Does the mechanism aid him in maintaining satisfactory school, home, vocational or community relations?

4. Does the mechanism aid him to solve future problems?

The person must learn, in order to be mentally healthy, to meet his problems in a socially acceptable manner, and only resort temporarily to approved adjustment mechanisms such as sublimation, compensation or rationalization. Doing so he is more likely to retain his confidence and feel secure enough to carry out his objectives.

There is a corollary to this principle. In order to be appreciated one must be concerned with the effect that his actions will have on the security and sense of adequacy of those with whom he has dealings. People accept us when we satisfy their need to be considered individuals of worth and ability. Most people like individuals who notice them and say and do things which raise their self-esteem. In a nutshell, we like to accept people who do things to make us feel more intelligent, more efficient, more noble or more secure.

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References

1. White House Conference, 1930 (New York: Appleton-Century-Crofts, Inc., 1931), p. 465.
2. Marzolf, S. S., "The Disease Concept in Psychology," Phychological Review, 1947, 54:211-21.
3. Maslow, A. H., "Some Theoretical Consequences of Basic Need-Gratification," Journal of Personality, 1948, 16:402-16.
4. Jung, C. G., Contributions to Analytical Psychology, New York, Harcourt, Brace and Co., Inc., 1928.
5. Adler, Alfred, Problems of Neurosis. New York, Cosmopolitan Book Corp., 1930.
6. Freeman, Max J., "Changing Concepts of Crime," Journal of Criminal Psychopathology, 1942, 4:290-305.
7. Sherman, Mandel, Mental Hygiene and Education. (New York: Longmans, Green and Co., Inc., 1934), pp. 286-88.

Success usually comes to those who are too busy to be looking for it.

Thoreau

THE USE OF PANTOTHENYLOL IN LOWER EXTREMITY LESIONS

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THE number and variety of lower extremity lesions in institutions for the treatment of the mentally ill is little appreciated by the profession at large. The confinement of restraint, the nature of catatonia, poor personal hygiene, poor eating habits, and the large geriatric population prone to arteriosclerosis all account for the high incidence of lower extremity lesions in such institutions.

The chiropodist of today, with his adequate training and his recognition by the medical profession through examination and license, provides a highly specialized approach to this problem as he works closely with the doctor of medicine in treating diseases of the lower extremities. This teamwork (and the beneficial results to the patient population) may best be illustrated by cases cited below from the files of the Chiropody Department, Springfield State Hospital, Sykesville, Maryland, an institution with an average patient population of 3,500 psychotics, deteriorated epileptics and psychopaths.

Due to the varied nature of the lower extremity lesions encountered, there has existed a need for a topical treatment that would not only be effective in a wide variety of skin lesions, but also be safe and convenient to use. Of particular interest are the reports on the use of the active alcoholic analog of pantothenic acid, a B-complex vitamin. Its remarkable ability to stimulate epithelization and granulation has been reported in such conditions as fissuring of the nipples, diabetic ulceration, arteriosclerotic ulceration, varicose eczema (with and without ulceration), traumatic wounds, etc. In addition to this property, it appears to exert an anti-inflammatory and bacteriostatic action. A 2% concentration in a cream base®[1] has been reported as being nonsensitizing even when used over a period of years. Additional advantages are that it is water-soluble, nonstaining and can be used with or without a dressing.

These desirable qualities stimulated our interest in evaluating the value of the pantothenylol cream in the varied types of skin conditions of the lower extremities that are found in our patients. A total of 69 patients (on the service of M.T.M.) were treated, with the results in a representative number of cases being cited below and summarized in Table I.

Case Reports

Case No. 1: P. T., male, 25 years old, tinea of the left hallux. When first observed the lesion appeared as a bloody mass giving off a serous exudate with intense pruritus. Within eight hours after the first application of Panthoderm Cream, the itching subsided and the exudation stopped in 24 hours. The lesion disappeared completely after seven days of pantothenylol therapy.

Case No. 5: C. C., female, 24 years old, chronic eczema, feet, of over two years' duration. This deteriorated epileptic exhibited a chronic eczematous process covering the plantar surfaces of both feet, having the appearance of a neurodermatitis. For the first three weeks of treatment with Panthoderm Cream, progress in healing was slow but definite. An additional three weeks of therapy resulted in the disappearance of the eczema and the patient has had no recurrence for one year.

Case No. 9: H. M., male, 61 years old,

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®[1] Panthoderm Cream, U. S. Vitamin Corp.

TABLE I

Case	Age	Sex	Diagnosis	Duration of Disease	Results
1	25	M	Tinea, Left Hallux	7 days	Excellent
2	59	M	Ulcer, pressure	3 mos.	Good—but not healed
3	72	F	Fungus, w/suppuration	3 weeks	Excellent
4	56	F	Ulcer, pressure	9 days	Excellent
5	24	F	Eczema, Chronic	2 years	Excellent-slow initial response
6	61	F	Fungus, interdigital	11 days	Fair—nonco-operative
7	45	F	Ulceration, Bunion, L. Hallux	4 mos.	Good—rapid healing initially
8	33	F	Fissures, Left Heel	18 days	Excellent
9	61	M	Ulcer, post-varicose veins	4 mos.	Excellent—Vit. A added
10	50	F	Ulcer, pressure, toe, Rt. Foot	1 mo.	Excellent
11	43	F	Ulcer, pressure, toe, L. Foot	6 days	Good
12	40	F	Paronychia, 5th toe, Rt. Foot	22 mos.	Good—but slow
13	76	F	Low grade infection, Diabetic, feet	16 days	Excellent
14	45	F	Fungus Infection with Suppuration	14 mos.	Good—but slow
15	44	F	Ulceration, Sub-Helomata	4 days	Excellent—recurrent
16	77	M	Paronychia, Right Hallux	4 days	Good
17	62	F	Chronic Eczema, ankles	8 years	Under control in 3 weeks

ulceration, hallux. This psychotic reported that the ulceration developed after rubbing the area with a towel because of pruritus. Examination found deep circulation greatly impaired in an extremity that had previously been the site of varicose ulcers, now healed. Bed rest and application of Panthoderm Cream®[1] q. 4 h. day and night were ordered. The lesion continued to slough until the middle phalanx of the hallux was exposed. At this point aquaeous Vitamin A was added to the Panthoderm Cream.®[2] Healing was remarkably hastened. This case could easily have resulted in an amputation if allowed to go unattended.

Case No. 16: P. T., female, 77 years old, paronychia, right hallux. This lesion resulted from improper nail care, and the nail groove was infected. After debridement, the groove was packed with Panthoderm Cream and dressed. Two days later the dressing was repeated, and on the fourth day the area was normal and well.

®[2]Aquasol A Cream (with Panthoderm Cream base) now available without compounding.

Case No. 17: V. S., female, 62 years old, chronic eczema, ankles. This patient, an epileptic (with psychosis), has continually scratched the pruritic eczema of eight years' duration. Several applications of Panthoderm Cream each day has resulted in relief of the pruritus and a disappearance of the eczema. Though response was initially delayed by the patient's persistence in scratching the area, the itching was relieved and the bacteriostatic action of the cream probably prevented an infection.

Summary and Conclusions

Pantothenylol, the alcoholic analog of pantothenic acid, was used topically as an adjunct in the chiropody treatment of a variety of dermatoses seen in a large mental institution.

This preparation showed clinical evidence of stimulation of epithelization and granulation, and of relief of irritation and pruritus.

Due to its "vanishing cream" base and its

(Continued on Page 108)

THE GOLFER'S FOOT

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GOLF is now being played by more than eight million people all over the globe. Of these, five million golfers are American and the number increases daily.

President Dwight D. Eisenhower, quite a golfer himself, recently wrote a letter to the Professional Golfers Association and expressed his enthusiasm. Said Mr. Eisenhower:

"While I know that I speak with the partisanship of an enthusiast, golf obviously provides one of our best forms of healthful exercise accompanied by good fellowship and companionship.

"It is a sport in which the whole American family can participate—fathers and mothers, sons and daughters alike. It offers healthy respite from daily toil, refreshment of body and mind."

A good solid frame is most important for a football player. Height is of the utmost for a basketball player. A good jockey is small and light. A fighter has to be rough and ready. A golfer needs none of these physical requirements. He can be short or tall, young or old, fast or slow, fat or lean and still play a first-class game. However, there is one basic physical must, and that is a good pair of feet.

The average golf course covers an area of about five miles, so that anyone who wants to take up golf, or continue to play the game, must consider his feet. As foot specialists we must be in a position to advise our eight million golfing patients concerning foot care, and solve their foot problems.

In cooperation with National Foot Health Week sponsored by the American Foot Health Foundation, the writer interviewed seven of the foremost golf professionals who participated in the Palm Beach round-robin. Jack Burke, Jimmy Demaret, Jim Turnesa, Douglas Ford, Lloyd Mangrum, Bobby Locke and Ed Oliver were asked what relationship there was between good feet and good golf. They all agreed that proper foot action and balance were the basic fundamentals of golf and you could not have good foot action if your feet hurt.

Jack Burke, who is the present Masters' and the P.G.A. champion, has stressed the importance of feet in his book. He writes:

"Proper use of the feet is as important as a proper hold of the club, and the golf course. Feet are an indispensable factor in any sport. A boxer may knock a man down with his fist, but he knocks him out with his feet. A battery may knock the ball out of the infield with his hands, but he knocks it out of the park with his feet. Each supplements the hit with footwork. Golf is not an exception. Every ounce of power not already inherent in the club itself must be sprung from the feet. This is why so many athletes have found it relatively easy to switch to golf from other sports—athletes like Ellsworth Vines, Sam Byrd, and the late Babe Didrikson Zaharias. These three became outstanding professional golfers. Dozens of others—like Joe Louis, and Bob Mathias — became good amateurs. The feet are the motor of the golf swing. Use them as such."

In writing on action of the feet in his book on golf, Sam Snead states that a professional can look at a player's feet in action and can always tell what is wrong with the stroke. "Foot action is one of the main differences between a good golfer and a duffer."

Ben Hogan has stated: "It is possible to play good golf from the hips upwards, but you must have good form from the hips down to be a really first-class player.

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It is impossible to attain balance without the proper foot action during the course of the swing."

Long before the golfer starts his five-mile "hike," excrescences must be cared for, and if any mechanical foot disturbance is present a balance pad or a foot mould should be made which can be utilized for street shoes as well.

The writer has found many cases of hallux rigidus in golfers' feet which has prevented too much walking Therapy in the form of infrasonic frequencies, traction by mechanical devices, as the ortho-trac and Budin machine, or the injection of novocaine or hydrocortisone have made it possible for a patient to continue playing for many years.

The average golfer spends quite a bit of time selecting the type of club he uses and frequently neglects one of the most important items, shoes. Golf shoes are best fittted on the wide side to permit heavier socks to be worn and to allow for some swelling which may occur because of the continued movement of walking up and down hills.

The golfer must be instructed to select a last that is most closely shaped to the lines of his feet. The golf shoes will not be, in most cases, the same size as street shoes. It is important to try them out at home for three or four days before deciding they are right. The spikes of the shoe may be covered with a piece of cardboard and an old stocking placed over this. This will prevent soiling, in the event they must be returned. If golf shoes do not feel comfortable around the house, you can be sure they won't after five miles of walking.

Some feet are sensitive to spikes on the sole of the shoe. This is often aggravated by walking to and from the club house on pavement. These feet do better by wearing rubber-soled lug shoes.

The heel height of the golf shoe is no problem in men, but in the case of a woman who has been wearing a three-inch spike all her life and then suddenly decides to play in a flat heel, the results may be disastrous. The writer has seen the result of such a change of heel height in the new female golfer, where the cramping in the calves and the burning at the metatarsal heads were so severe that bed rest had to be instituted. In these cases, a higher heeled golf shoe must be worn, even if heel lifts must be added to existing shoes. Treating the shortened calves by stretching and exercise should be prescribed to free the limitation of movement and permit the wearing of a lower heel.

Feet that present hallux valgus or hammer toe defects often do well with the contour moulded shoe designed with spikes. If this is not practical, removable latex jackets can be made for the painful prominences. Leather or cloth uppers are preferred because they are porous and breathe with the foot. A flexible but well-fitting shoe may be worn because of the soft terrain. The golfer knows that the foundation of the swing must be firm and, therefore, the feet must be encased in shoes that are flexible. At the same time the golfer must have a firm stance. A rigid shank and an extended counter are best.

Waterproofing the soles and seams of the shoes will protect the foot from dampness on wet days. The uppers should be lubricated to keep the leather soft. Shoes should be placed in shoe trees. This will prevent them from drying out with creases and bumps that will be irritating. Wool or part wool and cotton athletic socks are best, as they will cushion the foot by absorbing perspiration and keep the feet dry.

If the woman patient insists on wearing a nylon stocking for golf, she will do better with the nylon that has the full absorbent cotton foot. The cotton foot affords maximum absorption of perspiration and the burning, itching and clammy sensation is prevented.

Your golfer must be advised that a short stocking can be just as harmful as tight shoes. Improper length in a stocking may

cause contracted toes creating corns on the dorsum and a variety of nail pathology. In considering the correct stocking size, it is necessary to consider foot width as well as foot length. A wide foot requires more foot length than a narrow foot. In heavier-weight stockings, it is also better to fit a size longer than is usually worn. Before the foot is encased in the shoe, the stocking should be pulled away from the toes so that the shoe does not force the stocking to become shortened.

Golfers should be warned against removing the skin over a blister. Blisters should be promptly covered with a sterile piece of gauze or band-aid. Heel blisters are aided by lifting the heel out of the shoe by a pad of felt or rubber. In an emergency, the patient can use two handkerchiefs folded to the size of the heel.

The question of athlete's foot in shower rooms is probably the most frequent question asked the chiropodist. Is athlete's foot really contracted in this manner or how does it spread?

In the writer's chapter in the textbook, "Modern Foot Therapy," I showed the ineffectiveness of foot baths prior to entering shower rooms and swimming pools. Investigators have shown convincingly that exogenous exposure to fungi in swimming pools, shower stalls and bathrooms plays only a minor or negligible role in eliciting acute attacks of fungus infection of the feet. Attempts to induce acute attacks, or at least some evidence of clinical fungus disease of the feet in forty-five subjects, mycologically free from the disease, by exposing them deliberately to masses of pathogenic fungi in foot baths, were entirely unsuccessful. Although fungi were found one or more times on the feet of sixty per cent of the exposed subjects during six weeks after exposure, not a single instance of fungus disease occurred within this period.

Can foot-bath water contaminated with pathogenic fungi cause acute attacks of dermatophytosis in subjects clinically and mycologically free from the disease? Not one instance of clinical fungus disease was produced among sixty-eight human volunteers by immersing their feet for thirty minutes in foot-bath water heavily contaminated with dermatophytosis; although fungus mycelia were found on one or both feet of fifty-four per cent during six weeks after fungus exposure.

It can be seen then that exposure of the feet plays a minor role, if any, in the development of acute attacks of fungus disease. The local resistance of the skin is the all-important factor. Preventive measures should be based on an increase of local resistance to foot infection. This would include good foot hygiene, proper drying and use of foot powders, absorbent hose and ventilation in shoes.

Treatment consists of potassium permanganate soaks (1:3000 solution) for thirty minutes three times daily, or with 0.2 to 0.5 per cent silver nitrate solution as a foot soak. No fungicides should be used in this stage. After the acute stage subsides, the vesicular patches are replaced by scaling reddened patches. Soaks are continued as in the acute stage but less frequently. In addition, soothing agents such as Lassar's paste may be applied at night and removed in the morning. The chronic stage is characterized by thickened, hyperkeratotic plaques with scaling. Small vesicles may appear at the periphery of the plaques. Treatment consists of fungicidal ointments such as half strength Whitfield's or Castellani's paint.

March fracture should not be overlooked where there is pain, swelling and tenderness over the metatarsal area. The foot of the golfer may be subject to the same extreme fatigue as the foot of persons who are made to walk beyond their strength, whether it is due to a long march, or to work involving long hours of standing.

The symptoms and physical finding of march fracture are typical. At first the patient complains of a dull ache over the dorsum of the foot. Because no injury can

be recalled, he expects the pain to disappear, and goes about his duties until he becomes too uncomfortable to continue. Examination reveals considerable swelling over the dorsum of the foot with tenderness over the metatarsal region, more especially over the involved bone. On the plantar surface, tenderness, if present, is very slight.

The X-ray appearance will vary according to the length of time that has elapsed since the onset of the condition. Taken two or three days after symptoms appear, the X-ray is usually negative for fracture. By the tenth day after the initial complaint, the X-ray will reveal some evidence of a fracture line, or some early callus formation. There is rarely any loss of alignment of the fragments. After approximately three weeks, the callus appears overabundant for the size of the bone involved and the size of fracture.

How can the golfer travel eighteen holes without puffing? Probably the best way to avoid golf fatigue is by correct posture while walking and sitting. The vital organs, namely, the heart, lungs, liver, spleen, kidneys, stomach and intestines are trunk organs. Their good function depends upon having enough room in which to work without being encroached upon. Poor posture causes a lowered diaphragm, accompanied by a downward displacement of the viscera, decreased vital capacity, congestion in the abdominal organs and sluggish circulation. Poor posture has been known to cause a strain on the spinal chord and pull it out of shape. Incorrect foot posture produces numerous aches and pains, not only in the feet, but in the legs and back.

In standing or walking the toes should be pointed straight ahead. This position is best suited to support the body weight. Stated briefly, your body from a side view should line up so that the lobe of your ear, the outermost tip of your shoulder, the outermost tip of your hip, and the outside bump of your ankle are on a direct line.

The secret of combating golf fatigue lies in relaxation between holes, so as to allow the body to recover from the previous exercise. Sit in good posture. Do not slouch, take deep breaths, and do not get excited. In the sitting position, never cross your legs, as this may impair circulation from the knees down, and cramp the legs.

Your final bit of advice to your golfer patient should be: If your feet say "stop" at the ninth hole, you better obey them. You may have to use them at another time.

1900 Albemarle Rd.

References

Baer, R. L., Rosenthal, S. A., Litt, J. Z. and Rogachefsky, H.: Experimental Investigations on Mechanism Producing Acute Dermatophytosis of Feet, J. Amer. Med. Assn., 160:184, January 21, 1956.

Burke, J.: Natural Way to Better Golf. Hanover House (1954.)

Hogan, B.: Power Golf. A. S. Barnes & Co., N. Y. (1948).

Lee, M., and Wagner, M. M.: Fundamentals of Body Mechanics and Conditioning. W. B. Saunders, Phila., 1949.

Morrison, M.: Here's How in Golf. Doubleday and Co., Garden City, N. Y., 1949.

Roven, M. D.: Organization of the foot clinic in the armed services. Journal of N.A.C., Vol. 42, No. 9, Sept. 1952.

Roven, M. D.: March fractures. Canadian Chiropody Journal, Winter edition 1953.

Roven, M. D.: Chapter on Military Podiatry. Modern Foot Therapy. Foot Therapy Publishing Co., N. Y. (1948).

Snead, S.: How to Play Golf. Hall Publishing Co. 1952.

Stafford, G. T.: Preventive and Corrective Physical Education.

CLINICALLY SPEAKING

A place for the more informal presentation of reminders, suggestions, notes, observations and technics of value in office practice. Your contributions of short manuscripts or illustrative case histories will determine this section's usefulness.

AN EVALUATION OF THE CURETTAGE TREATMENT OF PLANTAR VERRUCAE

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Introduction:

Plantar verrucae[1] appear as hyperkeratotic areas on the sole of the foot, usually at the level of the heads of the metatarsals, and contain a core, or central structure. Any painful callus should be searched for the presence of a verruca, for quite often such verrucae do not project above the surrounding skin on weight-bearing surfaces, but are flat and usually surrounded by callus formation. Small, reddish, or brownish, black dots may be seen through the callus, or will become evident by moistening the callus, or paring away the less translucent superficial layers. These dots represent the capillary loops of the verruca. There[2] is no doubt that faulty weight-bearing plays an important role. Verrucae are more common in children. Although no definite organism responsible for the development of the verrucae has been demonstrated, there is enough evidence by inoculation experiments to satisfy the belief that they must be caused by a filtrable virus, and that verrucae are both auto- and hetero-inoculable.[3] Verrucae[4] are cutaneous papillomata and may be regarded as localized circumscribed hypertrophies of the prickle-cell layer of the epidermis. The essential pathology of most varieties is the same. Under the stimulus of a common agent, a filterable virus, the prickle cells undergo active division resulting in a localised hypertrophy; the horny layer is thickened. A few men feel that the question[5] of an infectious etiology is still unsettled.

Method:

The author has used the method of treatment described by Colonel George Prazak, Dermatology Service, Brooke Army Hospital, Fort Sam Houston, Texas.

Prazak[6] suggests using a Luer-Lok syringe, injecting 1% procaine, one to two cc., directly under the plantar wart, being careful not to contact the wart tissue itself during the procedure, since a recurrence may result from needle contamination and inoculation by extension from the needle tract. After anesthesia has developed, pare down the corneous layer until a line of cleavage is visible. Using a suitable curette, according to the size of the wart, exert considerable downward pressure at the line of cleavage to reach the base of the wart and scoop upward. Usually the wart will separate and shell out. After this maneuver, use curette in a circular motion around the wart to remove any possible remaining bits of wart tissue. Remove the overhanging epidermal tissue to afford full vision of the cavity. A plantar wart is round or oval, with cotyledons projecting into the subcutaneous tissue. To obtain a cure, all of these cotyledons must be removed. Using lateral finger compression to control bleeding, missed bits of wart tissue, which are lighter in color and waxy in appearance, may be visualized and removed.

The cavity is then packed with a ¼ inch wide strip of gauze dipped in tincture of Thimerosl 1:1000 (Merthiolate); a 2 by 2 inch pressure dressing is then applied,

*Cases Based Upon Work Performed at Brooke Army Hospital, Fort Sam Houston, Texas, During 1955 and 1956. Formerly Chiropodist-Podiatrist, Dispensary No. 2, Brooke Army Hospital, Fort Sam Houston, Texas.

and the patient is instructed to stand on his foot for a few minutes to obtain hemostasis. Pain is at a minimum, therefore, patients are prescribed aspirin only and returned to duty. The dressing is changed removing ¼ inch packing in forty-eight hours and a new dressing applied with Bacitracin ointment. Patient is then given bandaids and a tube of Bacitracin ointment; instructed to change dressing daily and return in a week for re-evaluation. Healing usually takes place in from 14 to 21 days.

Conclusion:

The above procedure was followed during the past 18 months on 87 cases in which there were only four recurrences. It is the opinion of the author that 2 of these recurrences were due to faulty technique.

This method is suggested for evaluation and possible use. It is the author's hope that some of his colleagues in our foot clinics will try this method so that this procedure can be better evaluated.

44 Public Square

References:

[1] Lewin, P.: The Foot and Ankle, Lea and Febeger Company, 1941, page 565

[2] Hauser, E. D. W.: Diseases of the Foot, W. D. Saunders Company, 1939, page 388

[3] Swartz, J. H.: Dermatology in General Practice, The Williams and Wilkins Company, 1953, pages 416-418

[4] MacKenna, R. M. B.: Diseases of the Skin, Bailliere, Tindall and Cox, 1952, page 279

[5] Dickson, F. D., Dively, R. L.: Functional Disorders of the Foot, J. B. Lippincott Company, August 1945, page 263

[6] Prazak, G.: "Curettage Treatment of Plantar Warts," A. M. A. Archives of Dermatology, January 1955, Vol. 71, pages 122, 123

DIABETIC ULCERATION WITH BUERGER'S DISEASE—CASE REPORT

SEYMOUR H. BLAU, D.S.C.
Jersey City, N. J

In our practice we are constantly consulted by patients seeking relief from the pain and other discomforting pedal symptoms and complications of peripheral vascular disturbances. Not infrequently a patient with vascular disease involving the lower extremities may come to us only after having received medical attention elsewhere. Notwithstanding the various physical and therapeutic measures that have been taken, sometimes for periods extending up to many years, the patient complains that the condition has not improved, or may have progressively deteriorated. Often it is in desperation more than for other reasons that the aid of a chiropodist is sought.

Within the prescribed limitations of our practice, cases of this type are indeed a welcome challenge to those of us who make it a practice to become acquainted with, and keep up to date on, the latest developments in medical therapy applicable in our profession. It is from this viewpoint that I am reporting a dramatic response, typical of the results obtained in a large series of patients treated in my practice, with one of the newer drugs. Arlidin®[2] (nylidrin hydrochloride N.N.R.), an effective vasodilator with marked therapeutic activity.

After the many disappointments in treating occlusive vascular diseases with the several "vasodilator agents heretofore available, one is reserved in assaying the response to any new medication. However, because of certain distinct pharmacological features of Arlidin, a test of its therapeutic efficacy in a number of cases unresponsive to other forms of treatment was undertaken. One of the significant advantages of this

®1 Astra Pharmaceutical Products, Inc.
®2 U. S. Vitamin Corporation.

drug is the high degree of tolerance exhibited to it. To date it has not been necessary for me to discontinue its use in a single case because of untoward reactions. An occasional patient may complain of a transient dizziness or palpitation, and in these instances a temporary reduction in dosage suffices to overcome the side effects.

Investigations of the pharmacologic action of Arlidin reported by Hensel,[1] et al., and Freedman,[2] indicate two distinct and complementary actions of the drug account for its superior merit. In a series of experimental tests designed for a comparative evaluation of the most commonly prescribed vasodilators, Hensel observed that Arlidin produced a dilation of the deeper vessels of the skeletal musculature, whereas, the other preparations acted principally on the superficial vessels of the skin. Equally important, Arlidin has been shown to increase cardiac output (minute stroke volume) as well as total circulating blood volume, with a resultant increase in blood flow to the vessels of the extremities. Subsequent to the publication of these findings, Pomeranze and associates treated a group of 24 diabetics with intermittent claudication and night leg cramps and the results obtained were in complete accord with the experimental findings. In his summary Pomeranze[3] states: "A pharmacologic evaluation of Arlidin indicates strong muscle vasodilator activity and an adequate increase in cardiac output" and "Clinical evaluation indicates excellent results in relief from intermittent claudication."

More recently Stein[4] investigated the clinical merit of the drug by objectively testing its influence on exercise tolerance in a series of 220 patients with intermittent claudication symptoms, previously treated unsuccessfully with other vasodilators. His results showed that "in patients with peripheral arteriosclerosis leading to development of acute or chronic symptoms of muscle ischemia, 65-70 percent are improved with Arlidin therapy. In the small group of patients with thromboangiitis obliterans the improvement was even more marked." Stein also comments on the absence of toxic reactions and "the unique advantage it (Arlidin) has over an array of other vasodilators which act more selectively upon skin vessels."

Included in the present series of cases treated with Arlidin, I cite the following as illustrative of one of the more obstinate types and heretofore most troublesome:

L. E., male, white, age 33.

Past History: diabetes of 15 years' duration controlled with 20 units insulin daily; approximately 12 years ago while in military service developed a vascular disturbance in both lower extremities, diagnosed as Buerger's disease. During this period had been treated by a number of physicians at an estimated cost of $8,000.00 covered in part by V.A. allowance for the service connected disability. Though the diabetes per se with respect to glycosuria has remained under control, the vascular symptoms, tingling, burning sensations, with excruciating pain on walking, became progressively worse.

First visit: (3-4 days between visits) (Fig. 1) patient referred by his physician 2 weeks after it was necessary for him to give up his job as an oiler at a petroleum refinery, because of severity of symptoms. Examination revealed two suppurative necrotic lesions on plantar surface of left foot; one under first metatarsal and the other under the fifth on lateral side; each lesion approximately 2 inches in diameter, circumscribed by erythema. Oscillometric readings: (Collens-Wilensky) L. F. ½ to 1; R. F. 1 to 2.

Diagnosis: diabetic ulcerative lesions, complications of Buerger's disease.

Treatment: local anesthetic (Xylocaine®[1]) administered; both affected areas aseptically debrided; antibiotic given intramuscularly; packings of Panthoderm Cream with antibiotic incorporated applied with instructions to patient to change packing with fresh application of cream each day. Patient placed on Arlidin tablets one b.i.d.

Fig. 1.

Second Visit: tissues were cleansed and necrotic tissue removed; area packed with Panthoderm Cream; Arlidin continued.

Third Visit: (Fig. 2.) inflammation subsiding, normal appearance of tissue returning; medication continued as before.

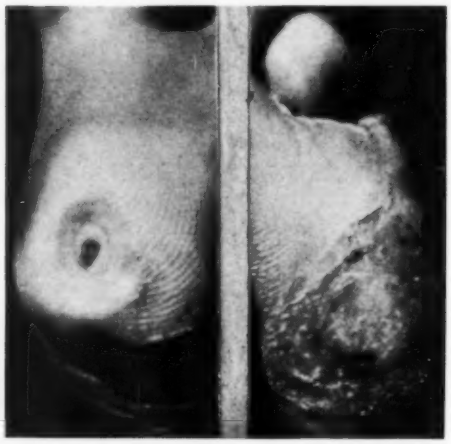

Fig. 2.

Fourth Visit: (Fig. 3.) considerable healing of lesion now evident with pinkish appearance of tissue surrounding site of healing lesion. Patient continued on Arlidin and topical cream.

Fifth Visit: lesions completely healed.

Sixth Visit: all tissue on plantar surfaces normal in appearance; patient able to wear shoes and shows steady improvement and progressive alleviation of symptoms of Buerger's disease, feeling of coldness in legs is gone; able to walk without pain, all foot sensations normal. Patient instructed to remain on Arlidin, one b.i.d. and to apply plain Panthoderm Cream to plantar surfaces as necessary to keep tissues soft.

Follow-up visits on later dates found the patient in excellent condition. Three and one-half weeks after treatment was started, he returned to his job completely free of painful and discomforting symptoms for the first time in many years.

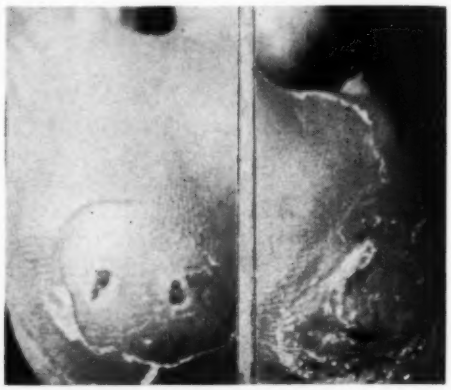

Fig. 3.

Oscillometric readings (Collens-Wilensky) taken after treatments were: L. F. 3-4 R. F. 2½-6. The physician who referred the case was not only pleased with the measures taken to heal the plantar lesions, but was even more impressed by the remarkable and unexpected improvement in the patient's vascular disturbance. Kodachrome photographs taken at each visit, reproduced here in black and white, reveal the changes in the appearance of the lesions as healing progressed. (Fig. 4 shows appearance ten weeks after first visit.)

Discussion

This case is cited, not because it is unusual. In fact, diabetic patients with similar symptoms and complications are seen regularly by chiropodists in their daily practice. This case is significant, however, as it serves to demonstrate the results that can be achieved with comprehensive treatment and when proper care and medica-

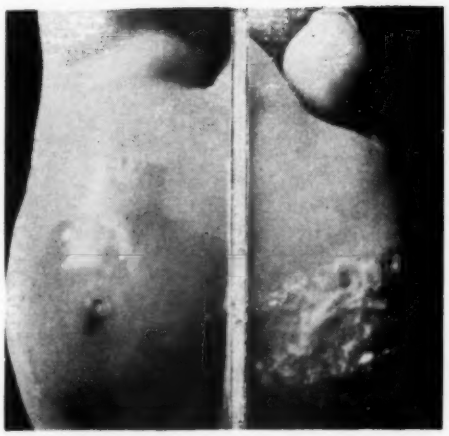

Fig. 4.

tion is utilized. In this instance, aside from the brief use of topical antibiotic to help control secondary infections, the successful outcome can be attributed to the complementary and specific action of Arlidin and Panthoderm Cream.

The rationale for the use of Arlidin has already been discussed. My interest in Panthoderm was first created by a published report by Boggan and Labecki[5] on the successful use of the cream for the healing of a diabetic ulcer on the plantar surface of the great toe. A number of other investigators[6-9] have also reported on the favorable results obtained with the cream in the treatment of various types of dermatoses, and ulcerations. A preliminary trial in a number of cases proved to my satisfaction that when applied as a dressing to surgical wounds, the cream enhanced granulation and epithelization of the traumatized tissues. Because this preparation is nonsensitizing and is a water-miscible cream that is not messy and does not soil clothing, patients cooperated in applying the cream daily between office visits, as instructed.

Summary

Arlidin, a new drug with unique pharmacologic properties, has been prescribed for conditions involving impaired circulation to the foot. In conjunction with Panthoderm, a granulating and epithelizing water-miscible cream, Arlidin has been employed successfully in treating a typical case of indolent ulcerations of the plantar surface in a diabetic with thromboangiitis obliterans (Buerger's disease).

Used in proper dosage, Arlidin is a valuable therapeutic agent for the podiatrist for improving circulation in the foot in patients with occlusive vascular disease, and thus contributing to the healing of ischemic ulcerations.

References

1. Hensel, H., Ruef, J., and Goldenhofen, K.: Human Muscle and Skin Blood Flow. Angiology, 6: 190, 1955.
2. Freeman, L.: Arlidin, A New Vasodilative Sympathomimetic Drug. Angiology, 6: 52, 1955.
3. Pomeranze, J., et al: Therapy in Intermittent Claudication. Angiology, 6: 271, 1955.
4. Stein, I. D.: Arlidin, A Clinical Evaluation of a Peripheral Vasodilator with Selective Action on Muscle Vessels. Ann .Int. Med. Vol. 45, Aug. 1956.
5. Boggan, W. H., and Labecki, T. D.: Diabetic Ulceration: A Case Report. Clin. Med., 61, 365, 1954.
6. Kline, P. R., and Caldwell, A.: Treatment of Various Dermatoses with Topical Application of Panthenol. N. Y. J. Med., 52: 1141, 1952.
7. Welsh, A. L., and Ede, M.: Panthoderm: A Topical Therapeutic Adjuvant. Arch. Dermat. Syph. 69: 732, 1954.
8. Spiesman, M. G., and Malow, L.: Pruritus Ani: Am. J. Proct. 6: 44, 1955.
9. Weiner, H.: Sandpaper Technic for Skin Keratoses. J. of Podiatry, 16: 13, 1955.

DIGITAL CALCINOSIS— A CASE REPORT*

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Monroe, Mich.

Subjective Symptoms
female, age 35

PATIENT had had several palliative treatments for an ingrown nail over a period of two years, the period of comfort following each treatment lasting from six to eight months. About two months prior to her last professional treatment she had noticed the sudden formation of a small immobile, hard mass in the proximal end of the nail

* (referred by colleague for surgery)

sulcus on the fibular side of her left first toe, the same side that had been previously treated for ingrown nails on several occasions. It did not increase in size from the time she first observed it until she reached a chiropodist's office, but it had become slightly callused and slightly sensitive to pressure. A cyst had been removed from the dorsum of the same foot just four years ago by a general surgeon.

Objective Symptoms

The mass referred to was a small, hard, immobile nodule covered by a cornified yellowish epithelium, and adherent within the proximal end of the fibular nail sulcus (see Fig. 1). The nail was midly incurvated. There was some rubor in the surrounding skin but no infection.

Fig. 1. Calcified cyst of left hallux.

X-ray Findings

Dorsoplantar and mediolateral views revealed a nodular calicified mass lateral to the middle third of the left first distal phalanx, and superior to its dorsal aspect. No trabeculae were evident. No disturbance of the phalanx was evident. (See Fig. 2.)

Fig. 2. Dorsoplantar radiograph shrowing relation of phalanx and calcified cyst.

Pre-Operative Diagnosis

Calcinosis.

Operative Procedure

Following a toe block of 3 c/c 2% novocaine with adrenalin, the nail was split longitudinally about 1/8" from its fibular edge. An incision was made through this split in the nail, and vertically, to the phalanx for the entire length of the nail, through the eponychium and just clearing the calcified mass. (See procedure described for nail root resection, J.N.A.C., March 1950.) At its proximal end another incision was made in the skin at right angles to the first incision toward the fibular side, and about 1/2" in length. A flap of skin was formed by picking up the small skin segment just proximal to the calcified mass and underscored just above the nail root. This flap was held out of the way with an Allis clamp, while a third incision was made parallel to the first just 1/16" lateral to the nail edge and along its entire edge until nearing the distal tip of the toe, where it was turned in to join the distal end of the first incision. The entire segment of tissue

surrounded by these incisions was carefully excised from the dorsum of the phalanx by sharp dissection. Exceeding care was used to include all of the nail root segment under the mass. (It was observed that the calcified mass was not adhered to the phalanx.) The tourniquet around the toe was released and, after the hemorrhage had subsided, a sliver of *Gelfoam* was inserted into the wound. The skin flap was then realigned over it and a compression dressing applied. Patient was permitted to go home from the hospital and begin weight-bearing on the following day. Date of surgery 3-23-56.

Post-Operative

3-26-56 Sterile redressing. No medication.

3-30-56 Sterile redressing. No medication.

4- 6-56 Removal of dry clot over wound. Wound healed. Patient discharged.

Pathologist's Report

"Microscopic examination of this tissue reveals an area of skin overlying a circumscribed nodule of bone and fat tissue. This bone is arranged in a circular fashion and undoubtedly represents calcification of a previously existing cystic structure. It is very likely that this cyst area had previous to the bone formation calcium deposition. No cartilaginous matrix is recognized at this time. Such an area of ossification could arise in any type of cyst, such as a necrotic epidermoid cyst. If other areas of similar ossification are seen, either clinically or by X-ray examination, a consideration of some disseminated calcifying disease, such as calcinosis disseminata or scleroderma, might be considered. If this is an isolated instance, it might represent local ossification as the result of trauma, trichinosis, epidermoid cyst, or foreign body.

This tissue is not neoplastic and it represents calcification and ossification in soft tissue.

Diagnosis: Ossification of soft tissue."

Conclusions

The sudden appearance of the mass with no apparent increase in size subsequent to its discovery, and the previous history of a cyst on this same foot, lead one to the conclusion that this was a calcified cyst. A reasonable examination of the literature failed to bring to light any case report of a like pathology on the pedal extremity.

Kresge Bldg.

LEG CRAMP

A. B. PASTERNACK, D.S.C.
Philadelphia, Pa.

SEVERAL papers on leg cramps have recently been published in chiropodical journals. None of these, however, contain information which can be claimed to bear the label of original or chiropodical background. They merely reiterate procedures of treatment, which have previously appeared in medical literature.

None of these articles attempt to ascertain the reliability or lasting improvement to be gained by the treatments suggested. They repeat borrowed, repetitious statements, which have been printed from one source to another without regard as to their value or reliability.

An argument against the above may be advanced, that it must be scientifically correct if it comes out of medical publications. This assumption is not necessarily correct. Medical opinions which have been accepted and adhered to, from year to year, from one publication to another, from one era to another, have been shown eventually to be misleading and incorrect.

Some recent challenges to accepted medical facts are:

1. There is not to be found in any accepted medical anatomy, dissection, or surgical textbook, mention of Illi's ligament. This ligament has been discovered and its existence demonstrated by Dr. Fred W. Illi of Geneva, Switzerland, during his several recent visits to the United States.

While here he engaged in research dissection at Chicago where he uncovered the existing ligament, being attached to the superior posterior aspect of the iliac articulating margin, within the capsular ligament, and extending in fan-like manner forward and downward to attach to the sacral articulating surface, which like a hinge, guides the sacrum in its movements between the ilia.

2. According to Dr. Manuel E. Lichtenstein of Chicago, who spoke before the Douglas Park Branch of the Chicago Medical Society, in 1956, anatomical illustrations of the extrahepatic biliary passages in textbooks and medical journals are erroneous.

3. That the human cell divides to form 48 chromosomes, a belief held by doctors and biologists for 40 years, was conclusively shown to be false by Dr. Joe Hin Tjio, a cytologist, before the First International Congress of Human Genetics held at Copenhagen. He proved that there are only 46 chromosomes and not 48, as we have been taught.

It is not the scope of this paper to delve into the numerous other misleading facts, theories, methods and fancies found within the confines of medical literature and practice. Some more recent findings have been presented, to illustrate the statement made in the opening paragraphs.

In 1939, when the author first presented his findings about leg cramps to the New Jersey Academy of Chiropodists at their convention in Paterson, and in 1940 when my paper was published in the Chiropody Record, Volume 23, Nos. 1-2, the subject matter was received with intense enthusiasm. However, the salient message which my discovery carried was accorded minor consideration because it did not encompass great technical detail nor complicated procedure of treatment.

The most important step in my method of controlling and subsequently eliminating the painful cycles of leg cramp is the following simple procedure, which I shall quote from page twenty of the original publication, mentioned above.

"When a person assumes a reclining position, either prone or supine, the very nature of the posture predisposes the posterior leg muscles to a state of contraction somewhat beyond the minimal normal stage. Somewhere between the starting point of this rest period and the termination of it, the patient will subconsciously get an urge to stretch the extremities. This urge may be the product of volition, muscular fatigue, or it may result from an involuntary stimulus to ease nerve tension.

"In any event, the stretching of the leg or entire extremity creates a further state of contraction beyond that which has existed due to the extension of the feet while assuming a reclining attitude. If the leg muscles are contracted beyond the borderline of adaptability, a tetanic reaction in the muscle fibers ensues.

"Muscle tissue possesses a normal borderline of adaptability, that is to say, the degree of maximum stretch and contraction within limits of tolerance to the particular muscle represents the borderline of adaptability. If, for one reason or other, this safety zone is passed, then a state of spasm or cramp sets in. .....If, however, the foot is maintained in dorso-flexion, it is possible to satisfy the urge to stretch the leg muscles without producing the customary leg cramp.

"It should be made clear at this point that it is not the extension or stretching of the calf muscles that creates a muscle spasm, it is the act of contracting or shortening the muscles of the calf as the individual plantar-flexes the foot while performing the leg stretch."

It is important that the patient be instructed to be on his guard, at each and every act of extending the leg or extremity, not to permit the foot to go into plantar-flexion. In due time, this caution will become automatic and as the trauma to the leg muscle fibers will cease, the tissues will become rehabilitated, often to the point where production of muscle spasm becomes rather difficult.

The attempt to stop leg cramping by employing various drugs, vitamins, or home remedies is not the preferred method. In the past twenty years, I have yet to meet the first case of muscle spasms which did not respond to my method of correction. Two years ago I was pleasantly surprised to learn that a Dr. Hugh MacDonald was totally in accord with me on the proper method of undoing leg cramps. I have no way of telling whether the good doctor was first familiarized with this method by having read my paper on the subject back in 1940, or due to his own research. It is not uncommon, however, to find that one or more individuals will arrive at similar conclusions independently of each other. Be that as it may, I am not interested in the establishment of priority, but concerned with the fact that this establishes agreement for treatment. This is the letter in reference.

"To The Editors: In regards to the editorial, 'Leg Cramps at Night' (Modern Medicine, Mar. 15, 1954, p. 82). I wish to state that most muscle cramps of the legs that occur in bed and while swimming are due to overstretching.

"The cramps in the calf muscles can be avoided if, when stretching, the foot is not plantar flexed but held at right angles to the leg, as in standing. Moreover, a cramp in the calf muscles can be stopped in about ten seconds by forcibly dorsiflexing the foot."—*Hugh MacDonald, M.D.*
Peoria, Ill. "Modern Medicine, June 15, 1954, P. 22."

The statement of facts contained in the above letter are so identical with those contained in my original article published in 1940 (fourteen years prior to the date of Dr. MacDonald's letter) that one might conclude we were in correspondence on the subject. Nothing can be further from the truth than to suspect even the remotest correspondence. I have never had the good fortune of knowing the doctor until I read Dr. MacDonald's letter to the editor of Modern Medicine magazine.

In conclusion, let me urge you for your patients' sake, to present this method of removing the agony of muscle cramps, to them and thus gain for yourself a lifelong indebted patient.

824 South 60 St.

ERRATUM for *Support of Body Weight* by E. S. Burgen, D.S.C., Vol. 47, No. 1, January 1957. On page 2 in the second column the last part of the equation of the Third Newtonian Law should read as follows:

$$F-2+F-3=W=R-1+R-2$$

JOURNAL

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PRESIDENT'S MESSAGE

Dynamic N. A. C. Policy

THE vital significance of the policy adopted at the last House of Delegates meeting should receive emphatic study of the far-reaching program that it sponsors. The *1956 October* issue of the *Journal pp. 688-689* published the sixteen-point series of policy statements. Every member should read and re-read every item because they point to a path of progress with a promising future for chiropody. At long last, an adequate and timely definition of Chiropody is spelled out which establishes our scope of practice in keeping with our present didactic and clinical training. "Chiropody is that specialty of medical practice which includes the diagnosis and/or the medical, surgical, mechanical, physical and adjunctive treatment of the diseases, injuries and defects of the human foot." From this substantial statement, our profession may be appraised by all concerned with no uncertainty. We are ready to assume all of the responsibility that our field of practice implies.

The welfare of the public is a basic theme in this development of our policy structure. Detailed concern for foot problems of children, handicapped persons, veterans, servicemen and their dependents, is given special consideration by planned programs of examination, research, and facilities for rehabilitation.

The expansion of our educational institutions to provide postgraduate research and training centers is foremost on the agenda of policy. An alert attitude toward our curricula of undergraduate study is accentuated.

The reduction of foot suffering and debility with its adverse impact on the economy of the American public is a fundamental reason for the need of a continuing policy of public education. Every agency that contributes to placing chiropody service in an accessible position for every segment of the public is endorsed, including phases of industrial, labor, health and welfare programs. Prepaid health plans including private, nonprofit, governmental and other voluntary programs should make chiropody service available. State and federal disability benefits and Workmen's Compensation Laws must include chiropody within their structure.

American medical practices will always be subject to the close scrutiny of the

American Medical Association. Through the years this organization has set up controls for the protection of the public against all loose and uncountenanced practices. We submit that the firm foundation of our policy is worthy of the approbation of all medical associations dedicated to proper service and practice, and it is our desire to establish liaison on a high plane of mutual endeavor. On the basis of our training and standards we petition for accreditation of chiropody hospital service through the official channels.

Throughout the nation, the regulation of chiropody practice is documented in every state law and the privileges granted in the practice must be in harmony with the training requirements. It shall be a policy to endeavor to standardize chiropody legislation for the protection of the public and the benefit of all concerned. Responsibilities of this nature and the multifold interprofessional and intraprofessional problems will be met with an adaptable and dynamic organizational structure of the National Association of Chiropodists.

The message that I wish to convey through this interpretation of our policy statements is the fact that a revitalized organization with a dynamic policy is in a position to assume responsibility for the foot welfare of the nation.

FELTON O. GAMBLE, D.S.C., *President*

OUR PUBLIC RESPONSIBILITY TO HOSPITALS AND PREPAID HEALTH PLANS

The question is frequently asked of us by our medical friends why do we wish to become associated with hospital staffs and prepaid health plans such as Blue Cross-Blue Shield? And won't our entry pave the way for "Cultists"? Even some of our own members wonder if possible accruing advantages would be worth the time, effort, and expense. After all, they say, our own surveys indicate that surgery is less than 9% of our practice, and over half of that is done in the office. And why should valuable office time be spent on a hospital service or attending staff meetings?

These questions were actually answered almost 18 years ago. In the Journal of the American Medical Association, April 8, 1939, a report of its Judicial Council infers that our profession has much to offer to "medical practice in a limited field." Please note that this is "limited field" and not limited practice. It continues, saying, "General opinion seems to be that chiropody fairly well satisfies a gap that the (medical) profession has failed to fill."

As a conscientious profession dedicated to public service we must continue to fill that "gap," and fill it in the best possible manner. When the 48 state legislatures and the Congress of the United States enacted statutes establishing legally our profession, and when the 48 state governors and the President of the United States signed these statutes into law they could never have intended that man's foot would receive less than the best possible medical care.

But the approximately 7,500 practicing members of our profession cannot begin to serve all of this nation's foot ills. And the time is not yet visible when this will be possible.

It, so, becomes a public charge upon each of us to become associated with

hospitals, clinics and institutions in order that we may acquaint, demonstrate and impart our knowledge and technics to our colleagues in the medical profession.

In metabolic and peripheral vascular departments we can save limbs and prolong a useful life. In physical medicine and locomotor rehabilitation we literally put patients on their feet. Geriatric patients can be made ambulant and foot pain eliminated or minimized. Pediatric departments have many children whose feet we can help to grow strong and some to become useful again. In surgery departments, aside from limited amounts of surgery, supportive foot therapy ambulates patients rapidly and may even reduce post-surgical complications. Psychiatric patients, once moving about with pain-free feet, are more easily motivated for mental rehabilitation.

These are a few of the areas where we have knowledge we must share. But this educative process is a two-way street. We will be also learning. In the office our horizons become narrowed to our field of practice. Our hospital and institutional associations will enable us to better understand the many systemic complications whose first symptoms we see in the feet. Our decisions for referral of office patients will be made easier and oftener and earlier.

To these medical facets must be appended other facets. The constant rise in cost of medical care is attracting much attention. Our special technics minimize periods of partial disability, and eliminate or shorten the amount of total disability. The patient either remains at work or returns to work earlier. These are obvious economic advantages to the patient, insurance carriers, and the public.

Returning to our original question it now becomes obvious that the answer is not necessarily that we want these things but that as individuals and as a profession we must do these things. We cannot shirk this duty by not facing it. The very significant medical, social, economic and psychological concomitants of our special knowledges and technics require us to participate to the fullest in the total health community.

MEMBERSHIP DIRECTORY

The last biennial membership directory was published in August, 1954. This spring will be published the first of what will now be an annual directory. The listing in the directory will be of all members in good standing as of March 1st, 1957. The address listed will be the one you can notice on your Journal envelope. Please advise the N. A. C. office if this is incorrect.

This is the last opportunity to make corrections or insure inclusion, before publication.

Congress Considers

THE first task to be considered by the new Congress is its organization and probably a brief outline of that will prove informative. In the House of Representatives, the clerk calls the meeting to order and a speaker is elected from candidates offered by each party. The speaker will serve throughout both sessions (1957 and 1958). In addition, each party will elect for its own assistance a leader: a majority leader and a minority leader; also a whip, a member whose function is to notify each member of his respective party, of the time when a vote will be taken on any important bill.

In the Senate, the Vice President presides and calls the body to order. To assist him each party elects certain other persons. The majority party will have a President pro tem, a floor leader and a whip, while the minority party will have a floor leader and a whip. This having been done, each party will select members to a committee whose function will be to determine the respective membership of all standing committees. The rights of membership seniority are respected, i.e., reelected members retain their positions on the same committees held in the previous Congress. If a member failed in reelection, his place is filled by those with fewer years of membership moving up and thus the committee's quota will be filled by adding one or more newly elected members of the respective party. A new member is allocated because of his qualification from his activities in public life and his personal desire; for instance, a banker will likely be added to the committee of finances or appropriations, and a lawyer to committee on judiciary and a farmer to committee on agriculture. The chairman of a committee is invariably the senior member of the majority party and thus a member having achieved chairmanship of a certain committee will continue in that position in succeeding Congresses so long as he is reelected and his party remains in the majority. The minority members are headed by their senior member, who is ready to take over the duties of chairman should there be a political turnover.

The committees begin to function immediately. As bills are introduced, they are referred to appropriate committees for study and approval or disapproval. If a bill in particular or in substance has been previously considered by the committee, definite action may be taken without further consideration. But if the bill incorporates new matter the chairman may desire to have its sponsors and opponents present their arguments to the committee members.

For this purpose he will announce dates when the committee will sit to hear arguments from those favoring and opposing its approval. If these arguments are voluminous they may be printed in pamphlet form and distributed among the members of the committee. When the committee reaches an opinion its action, with explanatory remarks, is published as a report and if favorable it accompanies the bill when it is presented to the respective body for its action. If the committee disapproves the bill its action is stated in the report and is final.

When a bill is passed by either house, it is referred to the other house where it takes a course similar to that of a newly introduced bill. Thus, it can be understood that the number of bills enacted into law by any single congress will be limited. Only a small percentage of those introduced will receive final action. The limitations are several and obvious. Committees are allotted for their activities the time on all working days up until noon when each body goes into session. It is possible for a committee on special occasions to secure the privilege of holding meetings in the afternoon when the respective house is in

session, providing they arrange to be notified when a vote is being taken and return to the chamber to cast their ballots.

The committee's report and recommendations are usually accepted by the receiving house, but not infrequently, the bill is extensively debated on the floor before final action is taken. If the two houses pass bills on the same subject or if one house amends or changes the text of the bill referred by the other house, each house appoints certain members to meet with members of the other house to harmonize the two versions. If the changes recommended by this conference are material both houses may be asked for endorsement.

This is a simplified statement of the routine followed in enacting a law. Now for our assistance in following or promoting legislation relative to our professional area, the following standing committees should be considered. In the Senate: Labor and Public Welfare, Finance and Appropriations. In the House of Representatives: Education and Labor, Interstate and Foreign Commerce, and Ways and Means.

Communication from Council on Foot Health Information

Sitting on the Executive Council for a year and a half has been both a sobering and maturing experience. It has given me an opportunity to learn and digest the real and fundamental problems incident to the growth and development of our profession. I have long recognized that our choice was between growth and development or liquidation as a profession.

It has been gratifying to see all members of the Executive Council deeply concern themselves with these problems, observe the trend of events and determine to find an effective solution. The results already achieved, while not always obvious and garish, are nonetheless substantial. Most importantly we have established a working and effective secretariat at National headquarters that is vigorously engaged in pursuing our problems on a daily and even an hourly basis.

It seems to me that of equal significance is that we have at long last learned with considerable precision just what constitutes our needs. The most basic of these is the need to transpose our schools into outstanding citadels of medical education, second to none other.

Considerable effort has been expanded in the field of research, public education, public health, government programs, state programs, labor health programs, etc., and all have led to the same obvious need for considerable expansion of our training programs.

As this article is being written, it is with the anticipation that the next Executive Council meeting will mark an auspicious beginning to the liquidation of this fundamental need. It is anticipated that most of this meeting will be devoted toward enabling the existing schools in making the necessary physical curricular, clinical and faculty expansion. The amount of public education and publicity incident to our great program of school growth will, in my opinion, be of greater magnitude than we have ever before experienced.

ALEC C. LEVIN, D.S.C., Chairman,
Council on Foot Health Information

TECHNIQUES IN FOOT SURGERY

L. R. McCAIN, D.S.C., F.A.C.F.S., and N. H. KETAI, D.S.C., F.A.C.F.S.
Editors, Publications Committee, A.C.F.S.

Illustrated case reports and discussions, suggesting approaches to chiropodical surgery, from the files of the American College of Foot Surgeons.

Arthroplasty of Fifth Toe for Removal of Heloma Durum

A white woman, aged 45, seen in the office, presented the following disorders: contraction of the 5th toes bilaterally, with painful heloma durum dorsally on the toes.

Palliative treatment had proved ineffective. The patient had tired of continual paring down of the heloma, and wanted to have them completely eliminated.

All laboratory findings were normal. The blood pressure was 140/97; temperature 98.8.

Procedure: Preoperative medication consisted of 1½ grs. sodium seconal®[1]. Local anesthesia was produced by 1½% procaine with epinephrine 1:100,000, and 4 cc. being used for each toe.

Surgical approach was made through a longitudinal linear skin incision about 4 cm. in length on the dorsomedial aspect of the respective toes. Incisions were deepened to the bone. The head of the proximal phalanx, plus the middle phalanx, was exposed by a combination of sharp and blunt dissection. The extensor digitorum longus tendon was retracted aside and the head of the proximal phalanx was removed in toto with bone rongeurs, and rasped smooth. The incisions were closed with the toes held in a corrected position, using four 000 silk horizontal mattress sutures.

Postoperative treatment was as follows: Sutures were removed eight days after the surgery. On the sixth day the lateral malleolus and ankle of the right foot were severely swollen. Bicillin®[2] I.M., together with elevation and ice packs, was prescribed. On the eleventh day, postoperatively, a sterile dry dressing with tincture of merthiolate was used. Whirlpool was used thereafter for the next following week to reduce swelling. Six weeks following the surgery the heloma had disappeared and there has been no trace of recurrence.

Fig. 1. Arthroplasty 5th Toe. Before (left) and after (right) surgery. Broken arrow is site of excrescences.

Sherman A. Mendelsohn, D.S.C.

Comment: This is considered to be one of the better technics for alleviation of a heloma durum in that minimal trauma is done. Also by leaving the extensor digitorum longus tendon intact, a functionally good toe is assured upon healing. After the primary cause for the heloma is removed, it involutes completely without residual excrescence. This eliminates the need for excising the heloma, excepting in cases

where there is an atypical type of heloma. In this particular case more therapeutic measures were used than is normally anticipated.

L.R.M. and N.H.K.

Partital Condylectomy

A female, age 27, presented herself at the office with horny excrescences overlying the proximal articulation of the fifth toes with surrounding inflammation.

At the hospital, all laboratory findings were within normal limits.

Procedure: Preoperative medication consisted of 1½ gr. sodium seconal, and Demerol®[3], 100 mg. I.M. Local anesthesia was produced by using monocaine 1½% with 1:100,000 epinephrine, a total of 5 cc. in each toe.

An elliptical incision encompassing the excrescence was made, and the excrescence was excised. The edges were then bluntly underscored, the tendon freed and incised. Further blunt dissection exposed the joint capsule which was incised longitudinally to expose the head of the proximal phalanx. The lateral condyle of the head was then resected with a bone forceps and rounded smooth with a tissue forceps and bone rasp. The tissues were then realigned and coaptated with three vertical mattress sutures of dermalon. Sterile dressing was then applied.

Postoperative treatment: Sutures were removed at the end of the sixth day, and a sterile dressing with Furacin ®[4] ointment applied. Seven days later another sterile redressing was applied using Furacin ointment. Seven days later a dry re-dressing was applied and the patient discharged. At the end of three weeks the patient returned to work. Relief was complete and cosmetic effect good.

Samuel C. Abdoo, D.S.C.

Fig. 2. Partial Condylectomy. Before (left) and after (right) surgery.

Comment: This is another rather common procedure for the removal of the heloma. However, excepting in an atypical heloma, it is generally not necessary to remove the heloma with an elliptical incision, as a lineal incision will suffice since the corn will involute of its own accord. Also with the lineal incision coaptation is easier.

By removing only part of the condyle of the proximal phalanx, enough pressure from the shoe may still be exerted over a period of time to cause the patient some discomfort. It must be remembered that there will be some proliferation on bone as healing takes place.

It is also very often necessary to work on the side of the middle phalanx in order to give a smooth surface over the lateral side of the fifth toe. In some instances it may even be necessary to smooth off the lateral side of the base of the distal phalanx.

L. R. M. and N. H. K.

® 1. Eli Lilly & Company.
® 2. Wyeth Laboratories.
® 3. Winthrop Laboratories.
® 4. Eaton Laboratories.

THE PODOPEDIATRIC CLINIC

JOHN T. SHARP, D.S.C.
Chairman, Committee on Children's Foot Health

This section is devoted to a discussion of the problems peculiar to the child's foot. A separate subject will be considered each month, on a question and answer basis. Members are invited to send in their questions relative to the various phases of podopediatrics. Questions will be answered in accordance with the heading under which they fall.

ARTHRITIS IN THE CHILD

What are the causes of arthritis in the child patient?

The causes of joint pain in childhood are myriad. In most instances the joint involvement is secondary to acute or chronic systemic illness. Arthritis may be a part of the syndromes of the following diseases: rheumatic fever, syphilis, tuberculosis, scarlet fever, Still's Disease, periarteritis nodosa, dermatomyositis, lupus erythematosus disseminatus, and scleroderma. The last five of these disorders, together with rheumatic fever, are usually referred to collectively as the "collagen diseases."

What are "collagen diseases"?

Collagen is one of the components of connective tissue. The so-called "collagen diseases" are those which produce pathological changes in this connective tissue element. Since the distribution of connective tissue involves many different organs and sections of the body, the symptomatology of these diseases is protean in nature. According to Holbrook and Hill, the outstanding clinical characteristic of the collagen group is multiple system involvement.

What is Still's Disease?

Still's Disease is actually a juvenile form of rheumatoid arthritis. It usually begins before puberty and is characterized by loss of weight, fatigue, fever, increased sedimentation rate, and chronic, usually symmetrical multiple joint involvement. The arthritis in these instances will usually produce permanent joint deformity. Atrophy, the formation of subcutaneous nodules, and enlargement of the spleen and liver are also observed in this disease. As a rule the disease primarily involves the proximal interphalangeal joints of the fingers. Still's Disease is sometimes confused with rheumatic arthritis, which occurs as part of the syndrome of rheumatic fever. However, its chronicity, its tendency to produce permanent joint deformity, and its involvement of the spleen and liver set it apart from the latter disease.

What are the characteristics of arthritis due to rheumatic fever?

This form of joint disease is essentially an acute polyarthritis. It may primarily involve a single joint, but as a rule, other joints are affected a short time later. The appearance of joint symptoms almost invariably follows a preceding attack of tonsillitis, streptococcic throat, or some upper respiratory infection. The joints are not permanently damaged by this disease, and the arthralgia present will characteristically respond very quickly to salicylate therapy.

Does scarlet fever produce joint symptoms?

Occasionally, scarlet fever will give rise to a transient form of polyarthritis as part of its syndrome. The joint involvement is of relatively short duration, leaves no residual deformity or impairment of motion. Like the arthritis which accompanies rheumatic fever, this form of joint disorder responds very well to salicylate therapy.

What are the symptoms of tuberculous arthritis?

This is essentially a chronic form of monarthritis, which is usually secondary to some tuberculous lesion elsewhere in the body. There is often a familial history of tuber-

culosis. In many instances there is a history of preceding trauma to the affected joint. The area displays a firm, pale, glossy type of swelling, with heat, and occasionally there is atrophy of the muscles adjacent to the joint. The actual swelling is "doughy" in consistency, and is the result of synovial hyperplasia rather than of an increase in the fluid content of the part. Biopsy findings are essential to a positive diagnosis of bone and joint tuberculosis.

What are the findings in syphilis of the joints?

Actually in early or congenital bone syphilis, the chief changes noted are in the shafts of the bones rather than in the joints. The most common lesion is an osteochondritis which in some instances may be of sufficient severity to produce a pathological fracture near the epiphysis which in turn may give rise to the condition referred to as Parrot's pseudoparalysis. According to Caffey: "the outstanding characteristic of infantile syphilis is the multiple bone involvement: in severe cases nearly all of the metaphyses are affected, but in milder cases the changes may be limited to two or three bones usually the tibiae, femora and humeri." There are usually other signs of syphilis present, clinically, in addition to the roentgenographic findings observed. The so-called "saber tibia," which is commonly associated with bone syphilis, is the result of a proliferative periostitis involving the anterior surface of the bone. In older children, the disorder known as "Clutton's joints" may be encountered. This is a painless bilateral hydrarthrosis involving the knee joints. On clinical examination the knee is found to be markedly swollen, but there is no heat or pain present. Probably the most common site of syphilitic arthritis is the knee joint.

What is periarteritis nodosa?

This is a degenerative disease which manifests itself chiefly in inflammatory lesions of the smaller arteries and the arterioles. It is one of the collagen group, and as such is of varied symptomatology. Clinically the picture in this disease is confused, and may simulate that of a variety of disorders. There is usually an acute onset with malaise, anorexia, and fever. Fleeting muscle and joint pains are common. Arthritis if present is usually temporary and migratory in nature. Periarteritis nodosa is often associated also with nephritis and polyneuritis. In some instances subcutaneous nodules may be felt along the course of the blood vessels.

What is dermatomyositis?

Dermatomyositis is one of the collagen diseases. It chiefly involves the muscles, skin and heart. It is characterized by an insidious development in which there is low grade fever, anorexia, and muscular weakness. Later in its course this disease gives rise to various skin lesions and to muscular contractions which may simulate those arising from arthritis. The chief differential point between this disease and true arthritis is that, as in all collagen disorders, dermatomyositis presents multiple system involvement along with any joint symptoms present.

What is scleroderma?

This is a disease of unknown etiology which primarily involves the skin and peripheral circulation. It is one of the collagen group. Clinically its primary characteristic often consists of pain, swelling and stiffness in the joints of the extremities. The skin over the fingers and toes, legs, arms and face becomes taut with the result that movement of the fingers and toes becomes increasingly difficult. In some instances there are vasomotor changes present such as sweating, cyanosis, and intermittent vasospasm. This disease is far more common in women than in men.

(Continued on Page 108)

PHARMACEUTICAL PREPARATIONS FOR THE PROFESSION

HARRY L. HOFFMAN, Ph.G., D.S.C.
Chairman, Council on Chiropodical Therapeutics and Pharmacy

A column devoted to preparations, new and old, with emphasis on their value and uses in everyday chiropody practice. This will be a regular monthly column and we invite questions, which we shall endeavor to answer, or obtain the answer.

Thephorin (Roche)
Antihistamine Drug for Allergic Disorders

Description: Thephorin is an antihistamine compound distinguished by pronounced clinical efficacy and a low incidence of side reactions.

Properties: Thephorin is useful in the treatment of allergic disorders. It has a low incidence of side reactions and is not likely to produce drowsiness. In fact, it has a mildly stimulating effect on some patients. When Thephorin is taken late in the evening, it may cause insomnia; the concomitant use of a mild sedative-hypnotic is recommended in such cases. Other side reactions, such as nausea or vomiting, are uncommon and do not require discontinuance of treatment in most instances.

Indications: Hay fever; allergic rhinitis (seasonal and perennial); vasomotor rhinitis; bronchial asthma; atopic dermatitis; allergic eczema; angioneurotic edema; drug reactions such as (penicillin reactions, pruritis, barbiturate dermatitis, allergic sulfonamide reactions, joint and bone pains due to drug reactions); serum sickness; and other allergic disorders.

Dosage: From 1 to 2 Thephorin tablets taken orally 1 to 3 times a day, usually is adequate in most cases. When the liquid form of Thephorin is preferred, from 2 to 4 teaspoonfuls of Thephorin Syrup, taken 1 to 3 times a day, is usually adequate. Dosage should be adjusted to the patient's response.

Supply: Thephorin tablets each containing 25 mg. of Thephorin, available in bottles of 50 and 100. Thephorin Syrup is a pleasant anise-flavored preparation containing 10 mg. of Thephorin per teaspoonful (4cc.); is available in 4-ounce and 1-pint bottles. A product of Hoffman-La Roche, Inc., Roche Park, Nutley 10, N. J.

Note: Also in 10 mg. tablets in bottles of 100 and 1,000 each.

Typical Prescription
Tablets Thephorin aa 25mg.
Disp. No. XXX.

Sig: One (1) T.I.D.
Syrup Thephorin 120 cc.
Sig: One teaspoonful T.I.D.
Ung. Thephorin 90 gm.
Disp: Tube No. 1.
Sig: Apply locally T.I.D.

Cortisporin Brand (Burroughs Wellcome & Co.)
Polymyxin B-Bacitracin-Neomycin with Hydrocortisone 1% Ointment

Description: Each gram contains Aerosporin Sulfate Polymyxin B Sulfate 5,000 units (0.5 mg.); Bacitracin 400 units; Neomycin Sulfate 5mg. (equivalent to 3.5 mg. neomycin base); and Hydrocortisone 10 mg. (1%) in a special low-melting point petrolatum base. Combines bactericidal with anti-inflammatory action. The spectra of the three antibiotics cover virtually all bacteria likely to be found topically. Sensitization rare.

Indications: Dermatologic: Atopic, contact, stasis, and lichenoid dermatitis; neurodermatitis; eczema; anogenital pruritus; pyogenic dermatoses.

Administration: A thin film is applied two to four times daily. In chronic conditions withdrawal of treatment is carried out by

decreasing the frequency of application until Cortisporin is finally applied as infrequently as once a week.

Supply: In tubes of ½ oz. with applicator tip.

Typical Prescription

Rx Cortisporin Ointment—15.0
Disp. No. 1 Tube
Sig: Apply thin layer twice a day.
By Burroughs Wellcome & Co., Inc., One Scarsdale Road, Tuckahoe 7, N. Y.

Ammens Medicated Powder (Skin Irritations)

Indications: To provide a protective barrier against chemical and bacterial skin irritants. To protect baby's tender skin. For healing of macerated skin crevices. To heal diaper rash; prickly heat. To alleviate discomfort of orthopedic appliances, surgical corsets, colostomy belts. To heal chafed areas in the obese. In the diabetic, to help maintain foot hygiene. In sunburn, to ease clothes-rub.

Composition: Starch granules evenly dispersed in talc and boric acid for a maximum of moisture absorption, cooling effect and lubrication. Ammens contains less than 5% boric acid. Oxyquinolin and zinc oxide give a protective coating which is soothing as well as healing.

Advantages: Dispersion of talc, starch and boric acid provides a large area for the absorption of moisture, has a cooling effect and allows mechanical slippage. Oxyquinolin and zinc oxide aid in protection against bacterial invasion of macerated crevices. The faintly medicinal odor of Ammens makes it especially suitable for professional recommendation.

How Supplied: In sifter top cans of two (2) and five and a half (5½) ounces. Bristol-Myers Company, 19 W. 50th Street, New York 20, N. Y. Distributor for Charles Ammen Company, Alexandria, La.

Imadyl Unction (Hoffmann-La Roche) Analgesic

Description: Contains histamine dihydrochloride 1% acetylglycol salicylic ester 5% methyl salicylic ester, synthetic menthol and thymol in a readily absorbable ointment base.

Indications and Use: In rheumatoid and arthritic conditions by local application.

Application: Applied by massaging vigorously into the skin after preliminary heat treatment or brisk rubbing, hands to be thoroughly cleansed after use of the ointment. May also be used by ionotophoresis.

How Supplied: In 1½ ounce tubes and 1 pound jars. Imadyl Unction by Hoffman-La Roche.

Cyclaine (Sharp & Dohme) Local Anesthetic Agent

Generic Name: Hexylcaine hydrochloride.

Chemical Name: 1-cyclohexylamino-2-propyl benzoate hydrochloride.

Action and Uses: For a variety of anesthetic procedures including infiltration; nerve block; caudal; lumbar epidural; topical; spinal.

Supply: Cyclaine injection 1% (for infiltration and block anesthesia) in 30 cc. vials. Cyclaine injection 2.5% with 10% dextrose (for spinal anesthesia) in 2 cc. ampuls. Cyclaine topical solution 5% (for topical anesthesia) in 60 cc. bottles. Sharp & Dohme, Division of Merck and Company, Philadelphia 1, Pa.

Tashan Cream (Hoffman La-Roche) Multivitamin Skin Cream

Description: Tashan Cream "Roche" provides four vitamins to help maintain skin health and promote healing. Each gram contains a vanishing cream base: Vitamin A...10,000 U.S.P. Units. d-Panthenol... 50 mg. Vitamin D... 1,000 U.S.P. Units. Vitamin E (dl-alpha-tocopheryl acetate) 5 mg.

Properties: Vitamin A and D help maintain skin health. Vitamin E relieves itching and promotes healing. Panthenol is essential for normal development of the skin and mucous membranes. The base of Tashan Cream allows the vitamins to be readily absorbed, but enough of the cream remains on the surface to soothe and protect the skin.

Indications: Tashan Cream is recommended for the symptomatic relief of: sunburn, irritated skin, detergent rash, diaper rash, prickly heat, cracked skin, itching, dry skin, chapped hands and feet, poison ivy, minor burns and insect bites.

Advantages: Provides four readily absorbed vitamins in a vanishing cream base. Relieves annoying skin irritations, aids healing, soothes and protects the skin and is pleasantly scented.

Application: Apply a thin layer of Tashan Cream three or more times daily, and rub in gently.

Supply: 1 ounce tubes, Hoffmann-La Roche Inc., Nutley 10, N. J.

Typical Prescription

Rx Tashan cream 30 gm.

Disp. No. 1 tube.

Sig: Apply a thin layer three (3) times a day. Rub in gently.

Wydase (Wyeth)
Hyaluronidase

Generic Name: Hyaluronidase.

Description: Highly purified, frozen-dried hyaluronidase, an enzyme that temporarily breaks down connective tissue barrier (hyaluronic acid) to speed the spread of fluids.

Action and Uses: Facilitates tissue absorption of fluids (as hypodermoclysis); resorption of hematoma, postoperative edema); local and regional anesthetics (infiltration and nerve block anesthesia), pudendal block ambulatory foot and ankle surgery; subcutaneously injected drugs.

Administration: For hypodermoclysis, add 1 cc. sterile physiological salt solution to 1 vial, containing 150 turbidity reducing units (TRU, equivalent to 500 viscosity units). The hyaluronidase solution may be injected into the skin prior to the start of hypodermoclysis, into the tubing (rubber tubing) just above the clysis needle, immediately after starting clysis in the usual way or may be mixed directly with the clysis solution before injection. For local anesthesia, add 150 TRU of Wydase solution and 0.5 cc. epinephrine 1:1000 to 25 cc. of anesthetic solution (or proportionate amounts).

Supply: Wydase (C.A.), ampuls, 150 and 1, 500 turbidity reducing units.

New Form: Wydase in solution. Rubber capped vials of 150 turbidity reducing units. Stabilized in sterile normal saline solution. A ready to use stable form of hyaluronidase in solution which may be stored at below 59°F. for as long as two years. For use as an aid in the administration of therapeutic fluids by hypodermoclysis and local anesthesia.

1098 Nat'l Press Bldg.

CORRECTION

In the December issue of the Journal, in the Pharmaceutical column, we discussed Steinberg's Solution: The following corrections are called to your attention.

Name should be Keramin Injection (Steinberg's Solution). Now available in disposable glass ampuls., in ½ cc. containers. The reason for the change from rubber capped vials to ½ cc. disposable glass ampuls. is that solutions of Vitamin A must be packed in an atmosphere of nitrogen to prevent deterioration. Rubber capped vials are therefore undesirable because of the air which is invariably introduced when a portion of the solution is removed.

In addition to changing the type of container, Campbell Pharmaceutical Co. has reduced the size of container from 1 cc. to ½ cc. in order to avoid waste. However, a 20% excess has been allowed so that a full ½ cc. can be drawn up into the syringe.

DIGESTS FROM THE LITERATURE

Anyone wishing to read the complete article, if not available in your local library, may borrow it through interlibrary loan. A microfilm may be borrowed from the National Medical Library, Washington 25, D. C., or a photo-duplication may be obtained from that library at a cost of fifty cents for five consecutive pages.

Anesthesia

Use of Lidocaine (Xylocaine Viscous 2 Per Cent) for Surface Analgesia, J. B. Stetson. Amer. Pract. 7: 581-84, 1956.

Lidocaine apparently has a central sedative effect, as observed when used for block analgesia, spinal anesthesia and surface analgesia. Surface analgesia is safe and easily administered. It is effective in alleviating pain and discomfort, and is given to avoid the depression of narcotics and general anesthesia. The dosage should be the smallest amount required for relief of the pain. Xylocaine Viscous 2% is easy to handle, rapid in action and of low toxicity.

Office Anesthesia: Types Not to Use and Why, M. E. Phelps. South. M. J. 49: 291-96, 1956.

Too often a routine anesthetic agent is used instead of one selected for the case. Successful use of the anesthetic agent, however, depends upon the knowledge and care used in administration, rather than on the agent selected. The toxicity of procaine and other local anesthetics is increased when epinephrine is added. All vasoconstrictors are dangerous in such conditions as hypertension, hyperthyroidism, marked arteriosclerosis, Raynaud's and Buerger's disease. Cocaine is the most effective and most dangerous of topical anesthetics, but the total mortality from pontocaine is greater because of carelessness in its use. Xylocaine is a good topical anesthetic agent, and may also be used for sympathetic block and local infiltration.

When using topical, local or regional anesthetic, the necessary equipment should be at hand if a severe reaction should occur. The proper use of the various inhalation anesthetics is discussed; ether is regarded as the wisest choice for office procedures. The intravenous anesthesic, sodium pentothal, is a perfect hypnotic, but may produce complications such as severe hypoxia, and laryngospasm. If laryngospasm occurs, the most effective remedy is succinyl-choline chloride intravenously, but this drug should be used by those skilled in administration of supplemental or controlled respiration.

Local Anaesthetic Properties and Toxicity of Hydroxyprocaine and Hydroxyamethocaine, I. C. Geddes, Brit. J. Anesth. 28: 55-66, 1956.

The comparative effects of hydroxyprocaine and procaine were studied experimentally. Hydroxyprocaine was used in 43 patients and 0.5 procaine in 28 control subjects. Hydroxyprocaine is 1.2 to 2 times as toxic as procaine and amethocaine is 4 to 9 times as toxic as procaine, thus hydroxyprocaine is one-fourth as toxic as amethocaine. A combination of 2 per cent hydroxyprocaine and 0.06 per cent hydroxyamethocaine does not give a longer duration of anesthesia than 2 per cent hydroxyprocaine. No advantages resulted from substitution of hydroxyprocaine for procaine in dental trials or in a series of 71 gastrectomies. It is recommended only as a possible substitute for amethocaine in topical anesthesia.

Arthritis

An Observation on Gout — The Joint Warning Sign, T. E. Weiss and A. Segaloff. Amer. Pract. 7: 969-70, 1956.

Of 95 patients treated at the Ochsner Clinic over a 5-year period, only 35 failed

to note the joint warning sign of a recurrent attack of gout. One-third of the 60 who identified a subjective reaction in the joint signifying an approaching acute attack described burning, tingling and stiffness of the joint, alone or in combination. Another third described a milder, different pain; over a fourth reported such reactions as warmth, sticking and awareness of the joint. Almost half of the 60 gouty patients had a warning sign preceding each acute attack, occurring from 2 to 48 hours prior to acute pain. These joint sensations which seem a reflection of early alteration of circulation in the joint are of diagnostic and therapeutic value, though their absence does not indicate there will be no imminent attack. Colchicine therapy should be instituted promptly after the warning sign is noted.

Comparison of Cortisone and Aspirin in Treatment of Juvenile Rheumatoid Arthritis, B. M. Ansell, E. G. L. Bywaters and I. C. Isdale. Brit. M. J. 1: 1075-77, 1956.

The effect of cortisone and aspirin therapy was tested in 25 children with rheumatoid arthritis (Still's disease), all with involvement of two or more joints for a period up to 9 months; 13 received cortisone and 12 aspirin. Treatment was given in 12-week courses separated by 1 week of no treatment. At the end of the first year before tapering off, maintenance dosage of cortisone was between 50 and 100 mg. daily in the 6 patients who remained on this therapy. Of the remaining 7, one had been taken off because of a trauma and the others required no further treatment. Of the 12 on aspirin, at a dosage of 1.3-4 gm. daily, 6 required no further treatment. Both groups improved clinically and functionally to a similar extent; the effects were the same as those reported earlier in adults.

Treatment of Gout, C. J. Smyth, E. R. Huffman and G. M. Wilson. Arch. Int. Med. 97: 782-92, 1956.

Much advancement has been made in the treatment of gout in recent years, so that acute attacks can be relieved, protection provided against recurrent attacks, and existing tophi reduced in size. Asymptomatic hyperuricemia which precedes acute joint symptoms is termed the first stage of gout; acute intermittent gouty arthritis the second stage; chronic gouty arthritis the third stage. Treatment varies with the stage of the disease. Since gout is a familial disease, the relatives of a gouty patient should know that if they have hyperuricemia they may possibly develop joint symptoms and therefore should avoid excess weight, severe trauma to the joints, and excessively high purine foods.

Acute attacks of gout are treated by protecting the parts with splints and a cradle and use of narcotics for relief of pain until medications become effective. Drug therapy (attended by bed rest) includes oral or intravenous colchicine, demecolcine, and butazolidin. Butazolidin is as effective as colchicine; their relative toxicity has not yet been determined. The hormones, ACTH, cortisone, hydrocortisone, and prednisone have been found to control acute attacks. When ACTH is used alone, oral colchicine should be given during its administration and for three days after to prevent occurrence. Withdrawal of cortisone, like ACTH, is invariably followed by recurrence. Steroid therapy is advised only when all other therapies have failed. Dietary restrictions of preformed purines do not prevent production of uric acid. A high fat diet causes uric acid retention. Avoidance of all high purine foods (liver, tongue, sardines, anchovies, meat extracts) and use of a low-fat diet with moderate protein are advised.

Frequent and recurrent attacks can be reduced by keeping the total body stores of urates at a normal level by administration of urate diuretics (uricosuric drugs), probenecid (Benemid), or salicylates, in adequate concentration. The dosages of these various drugs are described, including maintenance doses. In chronic gouty arthritis (stage III) the same drugs are used

as in stage II. Use of probenecid is important, and avoidance of foods high in purines. 30 references.

Circulatory System

Clinical Grading of the Severity of Obliterative Arterial Disease of the Lower Extremities, J. J. Cranley, Geriatrics 11: 91-96, 1956.

No type of treatment may be required by a patient with minimal obliterative arterial disease of the lower extremity, whereas gangrene and amputation may threaten one with a severe form of the disease. Treatment must depend upon the severity of the process. A history of intermittent claudication is a pathognomic symptom; this symptom indicates arterial insufficiency of the extremity and the presence of obliterary arterial disease secondary to arteriosclerosis or thromboangiitis obliterans in most instances. Intermittent claudication is much more informative qualitatively than quantitatively. Improvement in the distance the patient can walk after conservative treatment or lumbar sympathectomy is no criteria of the extent of improvement in the disease. On the other hand, intermittent claudication however severe is not an indication for amputation.

Treatment should depend upon the grade of arterial insufficiency; five grades are described. *Grade I.* Decrease in amplitude of the dorsalis pedis and posterior tibial pulse; its treatment is careful foot hygiene, avoidance of extreme cold or heat, elimination of tobacco, and use of a vasodilating agent such as Ilidar. *Grade II.* Absence of the dorsalis pedis and posterior tibial pulse; improvement should follow lumbar sympathectomy or if contraindicated, long-term therapy with a peripheral vasodilating agent. *Grade III.* Absence of the popliteal pulse; in a diabetic patient, absence of the dorsalis pedis and posterior tibial pulse; if the lower part of the femoral artery or the popliteal artery is seen (by arteriogram or aortogram) and considered suitable for direct arterial surgery, a by-pass graft is recommended, but if contraindicated, lumbar sympathectomy is the next best therapy. Long-term treatment with a proper vasodilating agent is advised if surgical treatment seems contraindicated. Lumbar sympathectomy should be considered for the diabetic with no pulses in the feet and a palpable popliteal pulse, unless preoperative tests show inability of the arteriolar bed to dilate; treatment then is instruction in foot hygiene, avoidance of infection and, in some cases, Buerger-Allen exercises.

Grade IV. Presence of rest pain and rubor on pendency; these are cardinal signs of this grade, whether or not peripheral pulsations are present. Vasodilating agents and lumbar sympathectomy are of little value in most cases; some show great improvement after resection of the localized femoral artery block and reestablishment of continuity in the vessel. *Grade V.* Continuous pain; petechial hemorrhages of the dorsum of the foot; skin necrosis. Gangrene of a major portion of the limb demands amputation; a supracondylar amputation is almost invariably successful. Since preservation of the knee is desirable, a below-the-knee amputation may be done first, followed a week later by a higher amputation if healing does not occur. A transmetatarsal amputation is considered first in a diabetic, but is not advised if rubor or petechial hemorrhages of the dorsum of the foot are present; lumbar sympathectomy is rarely recommended. The diagnostic signs of these various grades are discussed.

Arteriosclerosis Obliterans, Paul Williamson, Amer. Pract. 7: 574-78, 1956.

Arteriosclerosis was seen in from 13 to 20 per cent of patients over 60, sufficient in intensity to cause symptoms. Relief of adequate degree can be afforded about 80 per cent of such patients without resorting to

amputation or other extensive measures. Examination will show color changes, for example pallor develops in the extremity when the foot is elevated and held there for a minute; arterial pulsation will differ from that of a normal leg; diminished nutrition of tissues will be evident. Other signs include venous filling, trophic changes such as ulceration and gangrene, and roentgenographic evidence of atheromatous plaques. Treatment consists of diet (a low fat diet); thyroid extract in occasional cases; whiskey as a vasodilator, and use of Depropanex, given intramuscularly 3 cc. per day for 5 days, 3 cc. every other day for one week, then 3 cc. twice weekly. Buerger exercises for approximately 20 minutes twice a day are of some value. Sympathectomy or amputation may be required if pain is very severe. Non-infected gangrene requires no treatment, except avoidance of trauma. Ointments should not be used on ulcers. Whereas late treatment of arteriosclerosis obliterans is of little avail, treatment of early cases offers an excellent prognosis from the standpoint of pain relief.

Non-Specific Obliterative Angiitis: Five Case Reports, Including a Father and Son, L. L. Pennock and H. D. Primas, Jr. Angiology 7: 32-38, 1956.

Five cases of nonspecific obliterative angiitis occurring in Negroes, two of them father and son, are described. The patients, aged from 20 to 48 years, had symptoms from several weeks to 13 years; all had pain and coldness, and developed gangrene; all required amputation of a toe or a leg. Arterial and venous thrombosis with intimal proliferation was shown histologically. The absence of thrombophlebitis and of typical histological findings ruled out thromboangiitis obliterans, which had been suspected at first.

Sequelae of Deep Venous Thrombosis of the Lower Limbs: A Follow-up Study of Patients Initially Treated with Active Movements, I. C. Höjensgard. Acta Chir, Scand. 110: 331-37, 1956.

All patients of Aarhus County Hospital, Denmark, whether operated on or not, are routinely subjected to prophylactic arm and leg exercises, breathing exercises and early rising, unless contraindicated by the disease. Patients are asked to get up and be about on the afternoon of the day of operation. If thrombosis of the lower extremities or pulmonary infarction develops, active movements may be made in bed, if there is intense pain in the leg, or infarction is accompanied by high fever. Patients over 20 years old who were in the hospital for at least 4 days in 1945-1949, were followed up if still alive in 1955, if the case records showed any signs of thrombosis, embolism or phlebitis during hospital stay. Of the 73 per cent living, severe sequelae occurred in few cases; 62 per cent showed no symptoms or aggravation; 4 per cent developed leg ulcers. The group treated between 1931 and 1943, by conservative methods, instead of active movement, had severe sequelae in 66 per cent and 28 per cent developed leg ulcers.

Bilateral Mycotic Femoral Aneurysms; Report of a Case with Some Remarks on Mycotic Aneurysms in General, Lambert Rogers. Brit. J. Surg. 43: 374-74, 1956.

A case of bilateral, symmetrically placed, mycotic, femoral aneurysms is described in a man aged 29. Following antibiotic therapy and surgery, consisting of external iliac artery exposure extraperitoneally and division between ligatures, the aneurysms collapsed and did not reappear. Before introduction of antibiotics these lesions usually had a fatal outcome. Depending upon the site of the aneurysm proximal ligation, with division of the artery, endo-aneurysmorrhaphy, or excision may be the procedure of choice.

Recent Methods in the Study and Treatment of Atherosclerosis in Normal Subjects Eighty to One Hundred Years of Age, A. A. Goldbloom, H. B. Eiber, et al. Arch. Int. Med. 97: 359-77, 1956.

One hundred normal subjects, 80 to 100 years old, with no previous metabolic, coronary artery, endocrine or cardiovascular diseases, were studied by means of serum lipid partitions, lipoprotein fractions, paper electrophoresis, x-rays, electrocardiograms, ballistocardiograms, and serial pathologic findings, and compared with similar studies of subjects aged from 25 to 80 years. At the "threshold age," 60 to 75, the tendency to an increase of total lipids, certain serum lipoproteins, atherogenic index, and incidence of aortic dilation, is reversed; the values are similar to those of middle age, giving the aged subjects a "second youth." In subjects of advanced years, hypertension may be controlled, retinal hemorrhage diminished, tremors and spasticity helped, and pain from osteoporosis relieved by hormonal therapy. A warning is sounded against use of low-calorie, low-fat diets, lipotropic agents (unless the liver is damaged), promiscuous use of atropine and local antibiotic preparations for eye conditions, and excessive use of barbiturate preparations. Immobilization or use of splints is not advisable; the patient should not be allowed to assume a distorted body posture, not to assume a "do nothing" attitude.

Recurrent Primary Varicose Veins, J. A. Elliot. Canad. M. A. J. 74: 388-89, 1956.

Injection therapy, high ligation, multiple ligation, and high ligation with retrograde injection have all failed as primary forms of treatment of varicose veins, because of recurrence and complications such as deep vein thrombosis. The commonest cause of failure is that the surgeon does not differentiate between primary and secondary varicose veins, or he uses one type of operation for all types of these veins. The Trendelenburg test will aid in diagnosing whether the varicosity is in the long or short saphenous vein, or both.

The Stasis Syndrome, E. M. Faber and V. R. Barnes. Arch. Dermat. 73: 277-81, 1956.

Hydrostatic pressure of the veins increases in the presence of varicosities, fluid infiltration into the tissues increases and large amounts of protein are lost; since the lymphatics cannot absorb the large amounts of fluid and protein, edema develops. With increase of hydrostatic pressure in the capillary bed, trauma to the lower legs or ankle produces rupture of the capillary wall with resulting extravasation of erythrocytes into the cutis, together with deposit of hemosiderin. Marked sclerosity develops secondary to avascularity and ulceration occurs in areas of greatest devitalization, chiefly around the malleoli. Damage of the lymphatics by the preexisting thrombotic state causes lymphatic fibrosis; lymphatic stasis may continue after venous stasis has been relieved. Numerous illustrative diagrams are presented.

The Changing Incidence of Certain Vascular Lesions of the Skin with Aging, W. B. Bean. Geriatrics 11: 97-102, 1956.

Data are reported on a study of approximately 2,000 subjects with vascular lesions of the skin, to determine the effect of aging upon increase in size, number and frequency of the affection. Palmar erythema, an acquired vascular change in the skin, has a background, course and age incidence like that of spider nevi of the liver which apparently have no relation to age and occur in all ages from the very young to the very old. Venous stars, commonly associated with larger varices of the lower legs and thighs, increase with age chiefly in relation to chronic stasis in large veins,

but occur also whenever venous pressure remains high. Caviar lesions show a sharp, steady increase in incidence and size with aging. The cutaneous lesion in Osler's disease may become a clinical problem beginning in the third decade, with a gradual change over a period of years. Cherry angiomas increase sharply in incidence with increasing years and are almost universal among the aged. Further investigation is necessary to determine whether this increase in skin lesions results from the aging process, or whether they are caused by the stress and strain inherent in life.

Dermatology; Allergy; Fungus Diseases

Anaphylaxis Following Oral Administration of Penicillin, R. G. Weiner, J. R. Necheles and H. Stanka. Amer. Pract. 7: 377-80, 1956.

Anaphylaxis may follow penicillin therapy by whatever route administered; about 30 per cent of such cases have been fatal. Seven cases are discussed which resulted from oral administration of penicillin; 2 were fatal. One case was that of a 25-year-old woman, subject to severe attacks of bronchial asthma, who after taking a penicillin tablet became unconscious and cyanotic. She responded to intramuscular epinephrine and intravenous drip of dextrose and aminophylline, followed later by oral and intramuscular cortisone. Passive transfer and skin patch tests given 4 months later were negative. Negative skin tests do not assure that anaphylaxis will not occur, for numerous patients have developed reactions after negative skin tests. Before administering penicillin, patient should be asked regarding previous reactions to the drug-itching of the skin, urticaria, fainting, flushing or asthma. In case of serious need, where there is a history of previous allergic reactions to penicillin, the drug should not be administered until a skin test is made. Previous anaphylaxis is a positive contraindication to penicillin therapy. Use of the drug is not advised in active allergic or asthmatic patients. If its use is avoided in the ear, nose and throat, and on the skin and conjunctiva, fewer patients will become unnecessarily sensitive.

Dermatologic Manifestations of Endocrinopathy, J. J. Gold. Amer. Pract. 7: 396-400, 1956.

Dermatologic findings frequently assist in diagnosis of endocrine disease, for endocrine disturbance may affect various properties of the skin, such as vascularity, thickness, texture, hair, nails, and particularly, pigmentation. The pituitary is said to control human melanin pigmentation through its production of MSH (melanocyte stimulating hormone). For example panhypopituitarism is associated with a relative decrease in pigmentation; pregnant Addisonian and acromegalic patients may have increased melanin pigmentation, accompanied by increased titers of ACTH. The various dermatologic effects are described in cases of acromegaly, hyperthyroidism, hyper- and hypo-function of the pituitary, myxedema, ovarian hypofunction, testicular hypofunction, adrenal insufficiency or hyperfunction, adrenal and ovarian tumors, hypoparathyroidism, and diabetes mellitus. Pigmentation of various parts of the body is a common associate of endocrine disorders. Although certain dermatologic symptoms may help in the diagnosis of a particular endocrine disease, their absence does not rule out the diagnosis.

The Influence of Adrenocortical Hormone on Dermatomycoses, Especially in the Cushing Syndrome, G. Cremer. Dermatologica 111: 285-94, 1955.

Four cases of morbus Cushing, two of them caused by prolonged administration of adrenocortical hormone, are discussed to show the influence of the hormone on fungus infection. The course of the concomitant dermatomycoses indicates that in morbus Cushing resistance to fungus infection is much decreased when ACTH or cor-

tisone is administered. Whether the lowered resistance is due to disturbance of the sugar-balance, sometimes occurring in morbus Cushing, or the keratosis of the skin, is a factor, has not been determined. In one instance, a man aged 27 had developed an allergy to streptomycin and P.A.S. given in treatment of pulmonary tuberculosis; a thrombocytic purpura developed and was treated with ACTH; this was followed by Cushing's syndrome; removal of the spleen was of only temporary value and hormone therapy was continued. The mycosis developed first on the feet, toenails, thumbs and one index finger, then on the neck and under the beard and hair of the head. Four nurses were infected by the patient and developed ringworm patches. The suggestion is made that prolonged treatment with ACTH or cortisone be limited to cases where it is greatly needed.

Topical Use of Chlorquinaldol, H. M. Robinson, Jr., and M. B. Hollander. J. Invest. Dermat. 26: 143-47, 1956.

The value of chlorquinaldol in dermatologic therapy was studied in a series of 756 white and Negro patients with various dermatoses. An oily base ointment was used in 391 patients and a greaseless base cream in 365. Chlorquinaldol was effective in topical treatment of pyodermas and other dermatoses complicated by secondary pyogenic infection, and of value in adjunct therapy of atopic dermatitis, seborrheic dermatitis, contact dermatitis, neurodermatitis, psoriasis, mummular eczema, stasis dermatitis, otitis externa, erythrodermia desquamativa, dermatitis exfoliative neonatorum, miliaria ruba and infectious eczematoid dermatitis. The treatment was not helpful in herpes zoster, neurotic excoriations, lichen sclerosus et atrophicus, tinea capitis, trichophytosis corporis, uncomplicated epidermophytosis, pityriasis rosea, acne vulgaris, varicella, dermatitis exfoliativa, papular erythema multiforme, urticaria, dermatitis medicamentosa, lichen planus, and pustular bacterid. Specific hypersensitivity was found in 5 cases as shown by patch tests; evidence of primary irritation following local application occurred in 19 patients, but in these patch tests gave negative results.

Topical Treatment of Dermatoses with Steroids, R. C. V. Robinson and H. M. Robinson, Jr. South. M. J. 49: 260-65, 1956.

The effect of 36 steroid preparations on 4,217 individuals was studied. Three types of preparations were used; the greasy base ointment vehicles, of which the most acceptable were petrolatum-mineral oil combinations or plasticized hydrocarbon gel, proved more useful than the greaseless creams; oil in water emulsions were best adapted to acutely inflamed or exudative lesions; lotions are recommended for use over large areas because they spread easily. Hydrocortisone acetate or palmitate, applied locally in 1% concentration or greater in suitable vehicles, proved effective in therapy of responsive dermatoses. Fludrocortisone acetate in 0.1% concentration had a similar effect; this drug cannot be given systemically because of its effect on electrolyte balance. Prednisone applied locally was ineffective; prednisolone was beneficial in treatment of responsive dermatoses in 0.5% concentration but proved irritating. Secondarily infected dermatoses usually responding to steroid therapy were benefited by steroid-antibiotic combinations. Topical steroid preparations, while not curative, do offer immediate relief in self-limited inflammations of the skin. They proved ineffective in the following: psoriasis, lichen planus, discoid lupus erythematosus, morphea, keratosis follicularis, alopecia areata, epithelioma, acne vulgaris, fungus infections, pustular bacterid, herpes simplex and verrucae.

The Use of Boric Acid in Dermatologic Practice, R. S. Fisher. Arch. Dermat. 73: 336-41, 1956.

A questionnaire asking the opinion of dermatologists regarding the use of boric acid brought replies from 65 per cent of those certified by the American Board; 94 per cent used boric acid in their practice; 71 per cent of these frequently. It is generally believed that boric acid has a bacteriostatic effect as an ointment, or in wet preparations, and is soothing, bland and nonirritating. It was used in a wide variety of dermatologic conditions.

A Clinical Evaluation of Prednisone in the Treatment of Dermatoses, C. R. Rein and E. L. Bodian. Arch. Dermat. 75: 378-81, 1956.

A series of 212 patients with various types of dermatitis were treated with prednisone; the initial dose of 40 mg. per day was reduced to maintenance dose when clinical response warranted it. Most of them developed no side reactions; various side effects occurred in others, but generally disappeared with lessening of the dose to maintenance dosage. Although the initial response was slower than with the steriods used earlier, prednisone was four or five times more potent than cortisone or hydrocortisone.

Studies on the Dissemination of Fungi from the Feet of Subjects With and Without Fungous Disease of the Feet. S. A. Rosenthal, R. L. Baer, et al. J. Invest Dermat. 26: 41-46, 1956.

Ninety-one subjects with fungous disease and 40 without clinical evidence of such disease were studied. Sixty-seven of the 91 showed fungous filaments on microscopic examination of foot bath sediments; 20 cultures of dermatophytes were isolated. Five of the 40 without clinical evidence also showed fungous filaments. Mycologic scrapings of toe-webs and soles and other areas showing clinical changes, as compared with foot soakings, yielded a somewhat higher incidence of positive microscopic results and a decidedly higher number of isolations in culture. Extensive attempts to isolate pathogenic fungi from public shower stalls, locker room floors and areas around swimming pool were unsuccessful. The discussion brought out the fact that persons apparently infected by visiting such areas probably suffered an acute attack as a result of a flare-up of previously quiescent foci.

A Therapeutic Evaluation of Hydrocortisone and Oxytetracycline-hydrocortisone in Cutaneous Diseases, I. I. Lubowe. Amer. Pract. 7: 962-64, 1956.

An ointment containing 1% hydrocortisone and 3% oxytetracycline in petroleum (Terra-Cortril) when used on 44 patients with various skin disorders brought dermatologic cure in 57 per cent of these patients and improvement in the rest. Many of these lesions had been of long duration and had failed to respond to other local treatments. A synergism seems to exist when these two drugs are combined.

Technique, Application and Evaluation of the Dermatogram in Dermatology, W. Schoenfeld. Med. & Biol. Illus. 6: 77-85 1956.

Dermatograms can be obtained from almost all parts of the body except the scalp covered with hair. Areas immediately over bone are more difficult, but usable prints can be made even of such areas. They may be used to determine allergic intracutaneous reactions and to show atrophic processes in various stages of papular and lichenoid changes and scars, and also allow studies of the normal skin pattern. 18 figures.

Soap and the Skin, with an Investigation into the Properties of a Neutral Soap, I. Martin-Scott and A. G. Ramsay. Brit. M. J. 1: 1525-28, 1956.

The skin damage produced by soaps and detergents has been ascribed to a denaturing process, to removal of the protection of superficial skin fat and to alkalinity of the cleansers. The effect of a neutral soap was determined clinically and experimentally, in normal subjects and in patients with mild eczemas. After washing with the neutral soap, the skin-fat factor was unchanged and the pH of the skin remained normal, indicating no denaturing of the skin or altering of its protective acid mantle. It was also innocuous to individuals with subacute eczema who were unable to wash with any of the usual soaps.

Evaluation of Methods for Preoperative Degerming of Skin, O. K. Parry, A. Marinaro, et al. Amer. J. Surg. 91: 918-23, 1956.

Biopsy material obtained immediately before scrubbing the operative site, immediately after scrub and at completion of the operation, was studied to determine the effect of four degerming agents: bar soap containing 2 per cent hexachlorophene; liquid soap containing 1 per cent hexachlorophene; tincture of thimerosal 1 per cent, following scrubbing with plain soap; acridane derivative (acrizane chloride) following plain soap scrubbing. There was little significant difference between the four agents; the effective factor in preparation of the skin for surgical incision appeared to be the mechanical removal of gross dirt and germs by thorough cleansing with soap and water. The data proved that there is no such thing as true skin asepsis. Particular care in preparation of the skin must be given preoperatively in areas where sebaceous glandular components predominate.

Delayed Allergic Skin Responses of the Contact Dermatitis Type, H. N. Eisen. Bull New York Acad. Med. 32: 239-43, 1956.

Allergic contact dermatitis has all the essential characteristics of delayed allergic response to tuberculin. An experiment with animals sensitized with 2,4-dinitrofluorobenzene showed that skin applications one to two days old are effective in producing an allergic response, but applications three days old and older are ineffective. This indicated that only dinitro-phenyl-epidermal protein conjugates which are situated in the basal, viable layer of the epidermis are essential in development of the specific inflammatory reaction. A considerable discussion followed presentation of this paper.

Drug Therapy

Percutaneous and Oral Absorption of Vitamin A, A. E. Sobel. Arch. Dermat. 73: 388-94, 1956.

"A"-deficient and normal rats were studied to provide an alternate method of administering the vitamin without incurring toxic effects. Percutaneous absorption of vitamin A was found to be about 1/5 to 1/10 as efficient as oral absorption. The normal skin is more efficient than the "A"-deficient skin in percutaneous absorption. Vitamin E given with vitamin A increases storage of vitamin A, when both are topically applied. The most benign medium for percutaneous absorption of vitamin A proved histologically to be a wool fat petrolatum based, cod liver oil preparation (Desitin ointment).

Penetration and Distribution of C^{14}-Hydrocortisone in Human Skin After Its Topical Application, A. Scott and F. Kalz. J. Invest Dermat. 26: 149-57, 1956.

C^{14}-tagged hydrocortisone was used as a tracer incorporated into an ointment base containing 1% hydrocortisone, and applied on the skin of the upper back of human

volunteers. Biopsies were performed in all cases. Radioactive material was visible in the epidermis after one hour, and one hour later the material had concentrated into the basal layer; after six hours it was present in the cutis about the blood vessels; it had disappeared entirely in 16 hours. The penetration was more rapid before and during early erythema; there was no difference in late erythema. It is suggested that the basal layer is a center of metabolic activity, and that the basal layer is a major reactor in the evolution of cutaneous inflammation. The experiment did not substantiate the assumption of a preferential penetration of topically applied hydrocortisone through follicular structures.

Hydrocortisone Ointment Bases, F. Kalz and A. Scott. Arch. Dermat. 73: 355-60, 1956.

Eleven vehicles containing 1% hydrocortisone were investigated to determine the most generally useful in treatment of atopic dermatitis, seborrheic dermatitis, pruritus perini and contact dermatitis, existing in 264 individuals, aged from 6 months to 72 years. "Too dry" and "too greasy" bases rated poorly. The thinner the skin, the more suitable were the greasy bases; areas such as the groin, axillae, antecubital fossae did best with the drier bases. Four bases gave satisfactory results under most conditions, but individual choice depended upon the site of the dermatitis and the type of the disease. The patient with contact dermatitis accepted most bases; the atopic patient was the hardest to satisfy.

Inflammation and Cortisone, (Editorial). Lancet 1: 369-70, 1956.

An interesting review of the literature concerning experimental findings regarding the mechanism of inflammatory processes in the body is presented, particularly regarding the Shwartzman phenomenon. Inhibition of the localized Shwartzman phenomenon by heparin and decrease of fibrinogen observed during the generalized phenomenon are indicative of the important role of fibrinogen in inflammatory response. This principal action of cortisone, as observed in laboratory animals, is exerted during the very early stages of inflammation and inhibit and delay adherence of leukocytes to the endothelial walls and therefore their emigration and accumulation in tissue spaces. The data suggest that the direct action of cortisone on the endothelial cells and leukocytes somehow protects them against diffusible breakdown products of tissue or plasma components.

Education

Integration of Basic Science with Clinical Training, H. P. Lewis. J.A.M.A. 161: 27-29, 1956.

Knowledge of the basic sciences should be integrated with clinical instruction and nurtured in the residency years. A basic understanding of the skills of medicine is attained at the bedside. Thorough physical examination and history taking is a part of these skills; their excellence will depend upon a knowledge of anatomy, pathology and other basic medical sciences. Unless as a medical student the physician has attained such knowledge he will be unable to interpret his findings. Ward rounds, clinical conferences and weekly pathological conferences, with an opportunity to explore the basic biologic and clinical aspects of the condition of the patient, together with a free interchange of opinions and facts, and scrutiny of the radiologic and pathologic evidences, will produce a well-rounded physician able to take advantage of the advances of medicine as they come.

Can Osteopathic College Qualify as Approved Medical School? Medicolegal Abstract. J.A.M.A. 161: 96-97, 1956.

An abstract is presented of the appeal to the appellate court of Illinois to review the decision of the Department of Registration and Education, which denied the application of the College for approval as a college whose graduates may be permitted to take examinations to obtain a license to practice medicine in all its branches. The reasons for the refusal of the Department and exceptions to these reasons are discussed. The judgment of the lower court upholding the Department's findings was reversed and the cause remanded with directions to approve the plaintiff's application.

Trends in Specialization, H. G. Weiskotten, J.A.M.A. 160: 1303-05, 1956.

Questionnaires were sent to graduates of medical schools in the year 1945, asking the extent to which they had specialized during the nine years since graduation. The results were compared with corresponding figures of the classes of 1915, 1920, 1925, 1930, 1935 and 1940. A constantly increasing number of specialists are practicing in small communities. A 40 per cent increase in the number of graduates limiting their practice to the specialties was noted between the years 1925 and 1945. The more fully developed medical schools, with a few exceptions, have a higher average proportion of their graduates entering specialized fields. Of the 1945 graduates, 26.8 per cent are occupying full-time positions, in hospitals, institutions, medical schools, group practice, and in the Armed Forces. There is a great and progressive decrease in percentages of those entering the eye, ear, nose and throat specialty; a considerable decline is noted in public health, industrial and genitourinary fields. The greatest percentage gain is in internal medicine, and a lesser gain in pediatrics and psychiatry. Not much change was found in the other specialties.

Medical Practice; Group Practice

Results of Rehabilitation in the Field of Workmen's Compensation, S. L. Hanson. J. Chronic Dis. 3: 323-30, 1956.

Disability payments for life for total disability are provided in 23 of our existing compensation laws; in 35 of the jurisdictions medical benefits may be awarded for as long as the injured worker lives. Departments of legal medicine have been established recently in 15 of the 72 medical schools of this country. The effect of workmen's compensation laws upon industry and the employability of the medically disabled as well as those with physical deformities is discussed, together with methods used to reduce loss in industrial accidents. The discussion also describes rehabilitation of the amputee and of spinal cord injury cases, and the rehabilitation nurse program.

Musculoskeletal System

Medial Parameniscus Bursitis of the Knee, Jacob Kulowski. Amer. J. Surg. 91: 409-12, 1956.

Only microscopic examination can distinguish between the similar-appearing adherent bursae in the vicinity of the tibial collateral ligament and true parameniscus cyst. Two cases occurring in young boys are reported to emphasize the need for accurate diagnosis and treatment to prevent needless sacrifice of normal meniscuses. Pathologic evidence of meniscus cyst is lobulated multiloculated structure arising from meniscus tissue, and gross evidence of traumatic damage to the meniscus; most of them arise from lateral meniscuses. Usually they are smaller than the bursae; large lesions should cause suspicion of their bursal or synovial origin. The meniscuses were removed in both cases, since it seemed

that the dissected cysts had originated from these structures. The removed specimens were sent to two individual pathologists who diagnosed bursitis, with normal meniscuses.

Ligamentous Injuries About the Ankle Joint, J. M. Dziob. Amer. J. Surg. 91: 692-98, 1956.

The severity of injury to the ankle is proportional to the instability of the ankle mortise, and stability depends upon anatomic configuration and ligamentous support. The anatomy of the ankle is reviewed. The deltoid ligament is a single ligament in contrast to the lateral ligament with its three separate fasciculi. Rupture of the anterior talofibular ligament allows tilt of the talus through 5 to 15 degrees. If associated with rupture of the calcaneofibular ligament, the talus may tilt 15 to 30 degrees, but if all three ligaments are ruptured on the lateral aspect of the ankle, the rotation may reach 45 degrees, and the talus become locked against the inner aspect of the lateral malleolus. A tilt of the talus of less than 15 degrees may be treated by plaster immobilization of the foot and leg; a greater tilt requires suture of the torn ligaments. The posterior talofibular and calcaneofibular ligaments can result in normally stable ankles. All avulsions of the medial collateral ligament should have surgical repair ; in some cases resuture of the ligament to the remains on the edge of the malleolus suffices, while in other instances drill holes through the end of the bone are required to effect a good approximation of the ligament. Accurate suture restores the mortise and further surgery is not required. Rupture of the inferior tibiofibular ligament in association with other injuries to the ankle joint, if not remedied by suture of the avulsed deltoid ligament or screw fixation of the medial malleolus, may require exploration of the inferior tibiofibular joint to remove interposed soft tissue or even fixing the joint with a bolt through fibula and tibia.

Serial Sequential Development of Anomalous Metacarpal and Phalangeal Ossification Centers in the Human Hand, R. M. Snodgrass, S. Dreizen, et al. Growth 19: 307-22, 1955.

A serial study is reported describing the sequence of changes noted in the anomalous metacarpals and phalanges, as observed in the left hands of 266 children, aged 2 months to 14½ years, over a period of 3 to 6 months. The anomalies were of two principal types: supernumerary centers of ossification and pseudo-epiphyses. Each type was found to undergo alteration, and finally disappear as differentiation progressed toward the shape and size characteristic of adult bone. They are associated with malnutrition and diseases affecting ossifying tissue.

Some Observations on Calcifying Cartilage Matrix, D. J. Freeman. Arch. Path. 61: 219-224, 1956.

Determination of cartilage matric changes during calcification was made by means of various histochemical procedures, hyaluronidase, and qualitative historadiography. Comparison of the findings between controls and subjects gave support to the concept of matrix alteration being the essential factor in the property of "calcifiability" in cartilage. Further calcification may be largely on the basis of surface chemistry (crystal adsorption, recrystallization, and lattice formation).

Tendolysis Within the Digit Using Hydrocortisone Locally and Early Postoperative Motion, E. C. Weckesser. Amer. J. Surg. 91: 682-88, 1956.

Sixteen patients were operated on because of adhesions about tendons within

the digits resulting from trauma and operative measures. Hydrocortisone was placed locally about the tendons at the close of the operation. Patients remained in the hospital for 4 or 5 days after tendolysis and were encouraged to move their digits actively, in order to prevent reformation of adhesions. Good to excellent results were obtained in 52 per cent and some improvement in 32 per cent. Poor results in two patients were due to severe associated deformities; a third patient had an associated joint stiffness and a low pain threshold which contributed to the poor results.

Lesions of Cartilaginous Joints in Ankylosing Spondylitis, B. Cruickshank. J. Path. & Bact. 71: 73-84, 1956.

Histologic changes in the cartilaginous joints in 18 patients with ankylosing spondylitis were studied and compared with radiologic evidence. In the manubriosternal joint subacute osteitis was followed by granulation tissue formation gradually replacing joint structures and adjacent bones; further changes were fibrosis of joint and bone, with ossification progressing to complete synostosis. The intervertebral discs showed loose vascular fibrous tissue without inflammation, replacing the nucleus pulposus, the annulus fibrosus and occipital parts of the adjacent vertebral bodies with an accompanying ossification. Changes in the underlying bone were here much less conspicuous and may have been secondary to those in the discs themselves.

Lesions in the manubrio-sternal joint are not specific for ankylosing spondylitis, but may also appear in rheumatoid disease. Lesions in the intervertebral discs have not been noted in rheumatoid disease, or in any other disease than ankylosing spondylitis. The subchondral lesions in the manubrio-sternal joint were believed to be the uniform pattern of reaction of cartilaginous joints affected by inflammatory processes. 25 figures.

The Relationship of Function to the Microscopic Structure of Striated Muscle: A Review, H. E. Mautner. Arch. Phys. Med. 37: 286-92, 1956.

The 434 muscles of the human body, constituting approximately 45 per cent of the total body weight, are made up of about 250 million muscle fibers whose coordination and organization in a complex pattern are necessary for such activities as standing and walking. Each muscle fiber is composed of three parts: the myofibril (sarcostyle) or contractile matter; the sarcoplasma, in which the myofibril moves back and forth; the sarcolemma, which encases both. Each muscle fiber contains many longitudinally parallel and cross-striated myofibrils. Contraction is the only active, chemically induced motion, and consists of a tensional and dimensional part. The tensional part in conformity with the all-or-none law in each functioning uses up all available fuel; the dimensional part may be fractional. The sarcoplasm, an undifferentiated viscous protoplasm embedding the myofibrils, causes them to adhere. It contains two types of granules, the larger ones of neutral fats and the smaller lipoproteins. The sarcolemma or inner cell membrane separates the potassium-rich inner ionic environment from the sodium-rich outer environment; disturbance of ionic balance by an impulse traversing the sarcolemma produces action potential.

Surrounding the muscle fibers and adhering to their surface are rich nets of fibers which contribute to the muscles mechanical stability and protect against injury the semi-solid contractile matter and the thin sarcolemma. These spring-like structures produce a bouncing effect upon reversal of motion, making reversal smoother and faster. Relaxation and a resting stage follows cessation of impulses. The nerve supply consists of efferent and afferent nerve fibers which carry the impulse to the end plate of the sarcolemma through which it travels. Muscle spindles, distributed throughout all striate muscles, are com-

posed of intrafusal (within the spindle) and extrafusal (without the spindle) fibers. Since muscle spindles are resistant to disease, intrafusal fibers observed in atrophied muscle may be mistaken for parasites. Coming from the spindles are afferent fibers either with annulospiral endings which are excited by stretch, or flowerspray endings which are excited by contraction of the intrafusal fibers and spindles. Any pull or stretch upon the spindles produces a reflex shortening or myotatic reflex. This myotatically induced reflex contraction is necessary for tonus, locostation, and locomotion. Therefore, the myotatic reflex may be regarded as the master motion and the muscle spindle the master key, in human muscular activity.

Nervous System

Classification of Athetosis with Special Reference to the Motor Classification, W. M. Phelps. Amer. J. Phys. Med. 35: 24-31, 1956.

A study of thousands of athetoids has led to a motor classification consisting of twelve groups. The first five types—rotary, tremor-like, dystonic, shudder and flail —are characteristic motions that are seen. A patient is classified in one of these five primary types if tension is moderate and there is no specific localization to neck and arm or to one side of the body, there are no emotional or balance features, and no involvement of hearing or sight. The rotary type involves only the muscles participating in rotary motion; the tremor type consists of irregular, involuntary contractions and relaxations involving flexor and extensor and abductor-adductor mechanisms; dystonic motions are involuntary distorted positioning of the extremities; the shudder type is caused by a sour taste, unpleasant sound, sight or smell; the flail type is that of violent throwing around of arms and legs from the axial, shoulder and hip joints.

The next two types are tension and non-tension athetosis; then two types are described as topical, and finally three types with special characteristics and a tenth type with impaired hearing, an eleventh with "balance release," and a twelfth called emotional release athetosis. Change in type may occur after treatment, but the first five types never change from one type to another.

Late Neurologic Symptoms of Spina Bifida Occulta: Report of a Case, W. McK. Craig and D. W. Mulder. Proc. Mayo Clin. 31: 98-100, 1956.

A case is reported in a 12-year-old girl with difficulty in walking, numbness in the lower extremity, and inability to stand on her toes. A roentgenogram showed a spina bifida involving the 3d, 4th, and 5th lumbar and 1st sacral vertebras. Symptoms did not occur until the differential in growth of the spinal column and spinal cord was sufficient to allow the fixed filum terminale to exert traction on the cord. Symptoms ceased after laminectomy was performed.

The Problem of Pain, H. P. Rome. Proc. Mayo Clin. 31: 221-26, 1956.

The interpretation of a sensory stimulus depends upon past and present experience which may distort, magnify or minimize the sensation. A severe chronic pain can diminish fortitude and undermine ethics of the individual. Pain becomes intolerable suffering when the sensory perception become inextricably bound with anxiety through a process of elaboration and embellishment. Electroshock therapy and prefrontal lobotomy are effective because of a qualitative alteration of consciousness, with impairment of recent memory, diminishing of recall and a shifting of the focus of attention. The tranquilizing drugs are palliative agents in treatment of pain be-

cause of their pharmacologic effect upon the multisynaptic relays of the brain stem. Pain is more severe during night hours because the distractions of the day are missing and the patient is more aware of his sensations and past experiences. Since pain and suffering take a form which is characteristic of the established life pattern, the physician treats not only symptoms and disease, but the patient as a whole. This requires an understanding of his physical state and his attitudes and psychologic values as well.

What Is Pain? K. B. Corbin. Proc. Mayo Clin. 31: 205-08, 1956.

Pain is due to stimulation of the unencapsulated specific pain receptors, rather than to over-stimulation of thermal, tactile or other sensory receptors. Stimuli initiated at these receptors pass over the spinothalamic tracts, through the brain stem, then to the posterolateral and posteromedial nuclei of the thalamus. From there the impulses are relayed to the postcentral cortex and other thalamic nuclei and to the hypothalamus. Although awareness of pain occurs at the thalamic level, recognition of localization, quality and degree of the stimuli rests in the cortex. Physiologic and psychologic response to pain involves the highest cerebral mechanisms. Bodily pain calls forth a defensive reaction: increase of epinephrine output, acceleration of the heart, and increase in blood pressure and vasoconstriction. The opposite effect is seen in visceral pain: decrease in blood pressure and in heart rate; nausea and vomiting. Distinction is made between superficial, deep, referred, and central pain. Analysis of the patient's history and nature of the pain, with careful examination and differentiation, can lead to diagnosis of the source of the pain and usually to the nature of the harmful stimulus.

Use of Deep Procaine Injection for the Relief of Localized Pain, F. L. Reichert. Amer. J. Surg. 91: 699-704, 1956.

Peripheral nerves contain somatic fibers, sympathetic motor fibers and afferent sympathetic fibers, all conveying pain impulses. Trigger points intensifying pain on compression occur as points of deep tenderness beneath the skin of scalp, in neck and occipital muscles and their fascia and at the ends of the transverse processes of the cervical vertebras, and also beneath the superficial layer of the skin. After location of the trigger points, injection of 2% procaine in these areas may bring general relief from atypical neuralgia or chronic pain. A barbiturate is given before injection of procaine to reduce its toxicity. Long continued pain furnishes the alarm reaction described by Selye, with depletion of the adrenal cortex and sometimes the pituitary also, as shown by excessive perspiration and a tendency to cry. Restoration of these endocrine glands is provided by high protein, high vitamin C diet, together with multivitamines and minerals. One or more suprarenal cortex tablets, and one or more 5 gr. anterior pituitary tablets are sucked until relief is obtained, with potassium chloride 15 gr. given daily to offset the effect of these hormones on cellular potassium. Excitability of the neuromuscular apparatus may be reduced by calcium, given orally or by injection. The irritant initiating the pain cycle may be a long-forgotten trauma. Pain in the upper abdomen recurring over a period of years and diagnosed as various gastrointestinal diseases, may result from scar compression following sprain or strain of the attachments of various muscles or fascia. Injection of procaine at the trigger points in these attachments frequently brings immediate relief. Continued relief requires abstinence of alcohol and restoration to normal of vitamin, mineral and endocrine balance.

Differential Diagnosis of Low Back, Hip, and Leg Pain in Elderly Patients, J. M. Meredith. Geriatrics 11: 107-09, 1956.

Seven common lesions observed in the

aged are described in reference to their differential diagnosis. In borderline or doubtful cases of protruded lumbar disk, an oil study of the lower subarachnoid space is helpful in diagnosis of some cases, but in cases where no definite cause of the pain is determined, an exploratory operation, particularly of the fifth lumbar interspace, may be necessary. Diabetics may suffer a neuritis which simulates sciatica, even in cases where the diabetes is under control. Such patients when elderly may present a disabling peripheral neuritis characterized by muscle pain, areflexia and skin hyperesthesia. In cases of peripheral vascular disease accompanying a protruded lumbar disk, lumbar sympathetic blocks with novocain solution may indicate the proper course of therapy. Absence of intermittent claudication suggests use of sympathectomy. Increase in pain during walking, with relief after a few minutes' rest, is a diagnostic sign of peripheral vascular disease, especially the arteriosclerotic type. Elderly patients with peripheral pain in the leg, protruded disks or neuritis accompanying diabetes, may also have a long-standing phlebitis and varicose veins. It is difficult to determine how much of the leg pain is due to any one of these conditions. Pain simulating that of a protruded disk may be caused by a genital neoplasm extending into the sacrum, ilium or femur. However, protruded disks rarely cause pain in the anterior aspect of the thigh or inguinal area. Patients with neoplasms have increased pain in bed at night. The sedimentation rate and alkaline phosphatase values should be checked; if findings are high, a malignancy may be suspected. An oil study of the lower subarachnoid space should be made in patients with obvious arthritis of the joints of the lower leg in whom a protruded lumbar disk is suspected, and particularly if there is noted a sensory loss in the lower leg, diminished ankle jerk on the painful side, and normal or near normal jerk on the opposite side. In gouty patients with involvement of the great toe and swelling and redness of the skin, perhaps with palpable tophi, the sedimentation rate may be elevated during acute attacks, but such elevation is frequent in any subject over 60. Bony tophi in the region of the involved joint may be demonstrated radiologically; the blood uric acid is usually elevated and prompt response should follow adequate doses of colchicine.

Hereditary (Familial) Spastic Paraplegia: Pathologic Study of a Case, G. A. Schwarz and Chan-Nao Liu. Trans. Amer. Neurol. Assoc. 1955, pp. 54-56.

A case of familial progressive spastic weakness of both lower extremities, which had occurred in six generations, is described briefly. Trouble in walking began at the age of 18 and progressed until at 57 the man was immobilized by a contractured, hyperreflexic, spastic paraplegia-in-flexion. Death was due to unrelated infection. Microscopic study of the spinal cord and of the medulla oblangata are described. There was demyelinization with loss of axis cylinders of the spinal cord, but there was a normal distribution of fibers of various sizes in the pyramid of the medulla; the only change above this level was the loss of Betz cells. This led to the theory of retrograde degeneration with a primary disease process in the spinal cord. This theory was opposed in the discussion of the paper, wlth a suggestion made that it was a disease of the neuron as a whole which affected the periphery more than the central part, a phenomenon common to cases of hereditary systemic degeneration.

Neurosonic Surgery, W. J. Fry. Trans. Amer. Neurol. Assoc., 1955, pp. 86-88.

Recent researches in design of precision ultrasonic focusing instruments and their application in biologic investigations have led to use of ultrasonic energy in neuroanatomic, neurophysiologic and neuro-

pathologic research. This tool can be applied extensively to therapeutic procedures in clinical neurologic disturbances. By proper regulation of ultrasonic dosage enduring or reversible lesions can be produced in subcortical and deep-lying structures. Such experiments were performed in 250 laboratory monkeys and cats and well tolerated, and, furthermore, without alternation of other structures. Proper adjustment of parameters of ultrasonic irradiation by producing the desired histologically and physiologically reversible lesions permits a study of processes of recovery and of decay of function.

Recurrent Polyradiculoneuropathy: Observations of a Case Treated with Corticotropin and Cortisone, J. H. Austin. Trans. Amer. Neurological Assoc. 1955, pp. 105-110.

A case is presented in a man aged 40 who developed paraesthesia of his hands and toes. After 8 months he was unable to walk, sit up in bed or feed himself, had perioral paraesthesias, areflexia, marked distal weakness and minimal sensory findings. Given ACTH therapy, he was ambulatory in 10 days and back at work and asymptomatic in 2 months. He had recurrence 11 months later, with all the earlier symptoms. In all he had 11 bouts of the disease. Ten bouts followed decrease of dosage, progression occurred twice on placebos; two bouts began on the same dosage, showing need of greater treatment because of increased intensity of the underlying disease. The hormones temporarily suppressed clinical and laboratory manifestation of active disease; cure was not achieved.

Longitudinal Growth of the Lower Extremity Following Experimental Partial Peripheral Denervation, L. O. Litton and E. T. Haslam. Amer. Surgeon 22: 97-99, 1956.

Three types of operative procedures were performed upon male goats aged from 4 weeks to 3 months: femoral nerve section, selective chordotomy, sciatic nerve section, anterior nerve root section. Four animals died early in the experiment. Most of those that lived had a slight limp, but the most obvious defect was an inability to stand on their hind legs to feed from the trees as well as normal goats. Those with sciatic nerve section walked on the dorsum of the foot. No special difference was noted in the length of growth of the hind limb after peripheral denervation.

Effect of Ultrasound on the Threshold of Vibration Perception in a Peripheral Nerve, W. S. Alyea, D. L. Rose and E. B. Shires. Arch. Phys. Med. 37: 286-92, 1956.

Measurement of the threshold for perception of vibration was made before and after ultrasonic irradiation of the peripheral nerve, by use of the Bio-thesiometer. The measurements were made in 25 normal subjects at the palmar aspects of the tip of the fifth finger, which is supplied only by the ulnar nerve. Ten of the subjects were also tested at the tip of the thumb, which is not supplied by the ulnar nerve. Measurements were redetermined 1 hour later and 24 hours later. A great increase after 1 hour's time had disappeared after 24 hours. The conclusions were that within the dosage range commonly used in the clinic, ultrasound raises the threshold for perception of vibratory stimuli in the area supplied by the nerve thus treated.

New Growths

Sclerosing Lipogranuloma, H. H. Swicky and N. B. Kanof. Arch. Dermatol. 73: 264-65, 1956.

Although sclerosing lipogranuloma is a localized idiopathic fat necrosis occurring

in any fatty tissue, it is seen most often in the subcutaneous fat about the inguinogenital region. Complete surgical removal of all involved tissue is the treatment of choice, but this is frequently followed by recurrence. A case is reported in which recurrence followed in 6 months after the first and second operations.

Peripheral Neuropathy Associated with Neoplasms, D. K. Ziegler and F. Torres. Trans. Amer. Neurol. Assoc. 1955, pp. 229-30.

The incidence of peripheral neuropathy in patients with various types of neoplasms and the possible relationship to nutritional deficiency was investigated in 100 patients with neoplasms. Of these, 20 showed symptoms of moderate or severe neuropathy. The greatest number occurred in those with carcinoma of the digestive tract. Moderate to severe nutritional deficiency was more common in the patients with neuropathy than those without and anemia was found equally in both groups. Six per cent of the controls (with no carcinoma) also showed peripheral neuropathy. Although nutritional deficiency may have caused neuropathy in a few instances, some of the patients with neuropathy had no nutritional deficiency; also, nutritional supplements rarely reversed the process. The suggestion is made that in cases without nutritional deficiency that the neoplasm or its metabolic factors may have had an adverse influence on peripheral nerve function.

Pathogenesis of Milia and Benign Tumors of the Skin, W. Epstein, and A. M. Kligman. J. Invest. Derm. 26: 1-11, 1956.

Milia are benign tumors, arising from the epidermis or its adnexae. The stimulus leading to milium rather than some other tumor is not known. Milia are not retention cysts; they represent a keratinizing type of tumor arising from equipotential cells in any area of the epithelial system. Benign tumors can form wherever there is epidermis. Eccrine structures may be part of hamartomatous growths, therefore basal cell tumors of the plantar surface of the feet can arise even though no other adnexial epithelial germ exists in this area. It is superfluous to divide hamartomas into those arising from the adnexae and those formed in the epidermis.

The Influence of Intrinsic Factors in the Causation of Disease in Man: Illustrated by Neurofibromatosis and Lesions with Which It Is Sometimes Associated, K. Inglis. Med. J. Australia 1: 429-34, 1956.

A variety of lesions found in association with neurofibromatosis are described in the literature, such as local gigantism occurring particularly in the digits; diseases of the nervous system such as tuberous sclerosis complex, mental deficiency, hydrocephalus, primary tumor of the optic nerve, gliomatosis cerebri, and hereditary sensory radicular neuropathy; diseases of the skeleton, including spinal curvature, congenital pseudoarthrosis of the tibia, and melorheostosis. It is felt that these lesions are not due to extrinsic factors (traumatic, infectious, nutritional, irradiative), not to defective hormonal control, nor to disturbances of innervation, but primarily to some local abnormality of tissue in certain parts of the body, as a result of faulty growth and development. Their association with neurofibromatosis is ascribed to a common underlying intrinsic factor, operating at basic level (in spinal curvature and congenital pseudoarthrosis of the tibia), or at neural level (in neurofibroma), or at neurofibromatosis level (as in sarcoma arising in a neurofibromatous nerve). Since heredity plays an important role in neurofibromatosis, it is suggested that the lesions mentioned in association with neurofibromatosis may result from influences transmitted in the germ plasm.

Soft-Tissue Tumors of the Extremities, Exclusive of Skin and Lymphatics, R. K. Ghormley. Arch. Surg. 72: 817-23, 1956.

A brief discussion of some of the commoner soft-tissue tumors of the extremities is presented, using Soule's modification of Stout's classification. Pathologic diagnosis is necessary in these neoplasms since many of them arise insidiously with little or no pain. Except for certain lipomas and hemangiomas, which have characteristic roentgenograms, exact diagnosis is made only by surgical exploration. Most of these growths require wide excision to prevent recurrence. Liposarcoma and synovial-cell sarcoma have a grave prognosis and require early recognition and amputation for their cure.

Neuromyoangioma of the Leg with Symptoms Similar to Glomus Tumor, L. K. Ferguson. Amer. J. Surg. 91: 1021, 1956.

A woman aged 55 had flash pains on the anterior surface of the right leg for 6 years and a painful spot just below the knee for 2 years, where a mass developed a year later. Dampness or cold produced severe localized pain. A pea-sized greyish red encapsulated nodule was removed from the subcutaneous tissues and several small vessels connected to it were ligated. Relief was immediate. Pathologic examination showed absence of glomus cells and a diagnosis was made of neuromyoangioma.

Tumefactive Pigmented Villonodular Synovitis, J. J. Toma. Amer. J. Surg. 91: 1013-15, 1956.

The case of a diffuse proliferative synovial lesion of the right knee occurring in a 54-year-old woman is described. The synovial mass embedded in muscle substance was removed and two weeks later, a similar mass was removed from the anterior surface of the same leg. The swelling had been progressive for approximately seven years without producing structural changes. The lesion was therefore classified as tumefactive pigmented villonodular synovitis.

Physical Medicine; Rehabilitation

Disability Evaluation in Workmen's Compensation, A. P. Aitken. Amer. J. Surg. 91: 711-13, 1956.

The principles for rehabilitation of the injured worker, and the operating principles for his compensation, as established by the American College of Surgeons, in cooperation with the various labor unions, the United States Department of Labor, United States Public Health Service, Office of Vocational Rehabilitation and two insurance companies, are listed in detail. Under such a system it is hoped that much litigation will be avoided, and that injured workmen will be restored to useful employment at their highest attainable skill.

Rheumatic Diseases

The Basic Treatment of Rheumatoid Arthritis, A. S. Hill. South. M. J. 49: 401-02, 1956.

It has been estimated that there are over 2½ million cases of rheumatoid arthritis in this country. The basic treatment is orientation of the patient, diet, general hygiene, rest, exercise, treatment of foci of infection, physical therapy, psychotherapy and prevention of deformity. Bed rest except for bathroom privileges may be required for a period of six weeks or more in acute cases. Two daytime rest periods are advised in mild cases. Massage is helpful if not too vigorous together with tolerated active exercise and judicious use of heat. Prevention of deformity may require splinting of the local parts to provide rest; if deformity progresses, orthopedic consultation is advised. The fundamentals of basic care should be given consideration before grasping at a "miracle" drug not yet completely evaluated.

Surgery

Soft Tissue Injuries to the Feet and Legs, M. L. Mason and J. L. Bell. Amer. J. Surg. 91: 689-91, 1956.

Soft tissue injuries to the lower extremities require evaluation of nerve and tendon functions distal to the injured site at the time of initial examination, and any circulatory disturbance must be ascertained before operation. Protection must be provided against tentanus infection, by use of toxoid booster in patients previously immunized and tetanus antitoxin in those without such immunization. First aid measures such as cleansing, removal of foreign material and application of medicaments are contraindicated except in chemical burns. Hemorrhages usually can be controlled by elevation of the extremity; application of a tourniquet may impede venous return without stopping arterial inflow, or pressure may promote vasospasm of the collateral circulation. Profuse hemorrhage may be controlled by applying a blood pressure cuff to the thigh with a pressure of 280 to 300 mm. mercury. The procedures used in treatment of contusions, lacerations, crushing injuries and burns are described. Postoperative care consists of use of crutches for 48 hours for trivial soft tissue injuries, bed rest for a few days in more serious injuries; protection of wounds by application of resilient compression dressings to prevent edema distal to the wound; use of splints of aluminum or plaster to aid in maintaining immobilization; quadriceps exercises for bed patients to lessen possible disability from inactivity. Generally patients sit in wheelchairs after 48 hours with the injured extremity elevated on the foot and leg rest. Initial dressings are not disturbed for approximately 5 days except in cases of severe pain or persistent fever; compression dressing may be required for 3 to 4 weeks postoperatively, especially if skin grafts or skin flaps have been used.

Tyloma; Heloma

Bunions and Calluses in the Elderly Patient, L. T. Ford. Geriatrics 11: 71-75, 1956.

Bunions if asymptomatic require no treatment. In the absence of pulsation of the posterior tibial and dorsalis pedis vessels, corrective surgery is contraindicated in the elderly. A metatarsal bar on the sole of the shoe may aid in cases of pain and callus under a metatarsal head. Temporary relief of pain in the area of the bursa over the bunion may be obtained by injection of hydrocortisone 5 mg. into the bursa and 5 to 10 mg. into the first metatarsophalangeal joint. The possible presence of acute gouty arthritis in acute inflammation of the first metatarsophalangeal joint should be ascertained. Blood uric acid determination may be made and colchicine therapy given if gout seems evident.

If simple measures fail and the pain is disabling, surgical treatment may be given if there is adequate circulation and no significant peripheral vascular disease; if the operation is for relief of pain only; if the patient's condition warrants such a measure. A Kellar bunionectomy is advised in cases of osteoarthritic changes accompanying a moderately severe bunion deformity with hallux valgus in the elderly. The exostosis and proximal portions of the proximal phalanx of the great toe are excised. An exostectomy of the prominent portion of the first metatarsal head sometimes is sufficient to relieve pain.

Conservative therapy is used in painful calluses. Paring is unwise; rubbing with fine sandpaper is preferable. Warm soaks, nightly Ichthyol poultices, protective pads to decrease pressure, metatarsal bars, heel pads, removal of the hard counter in the shoe, and toe-clenching exercises are devices variously used. Some older patients with pain and disability from callosities may require surgical therapy. A simple procedure is elliptical excision of the callosity over the proximal interphalangeal joint, section of the extensor tendon, ex-

cision of the interphalangeal joint, then resuture of the extensor tendon, the toe placed in corrected position, and closure of the tissues.

If a deformed hammer toe is subluxated or dislocated over the corresponding metatarsal head, with a resulting thick callus beneath, the base or all of the proximal phalanx of the painful toe may be excised. This will permit the toe to fall into line, relieving the downward pressure on the metatarsal head. A Hoffman resection with removal of all metatarsal heads is seldom indicated in an elderly person. However, when done, three longitudinal incisions on the dorsum of the foot are preferable to the large trap-door incision of Hoffman. Postoperative measures are dressings for immobilization and encouragement of early ambulation.

Observations on the Orientation of Keratin in Thickened Cornified Epithelium of the Human Skin, A. G. Matoltsy and G. F. Odland. J. Invest. Dermat. 26: 121-26, 1956.

The structure of callus was determined by the polarization optical method, and interference colors produced by various areas of the callus studied so that conclusions could be drawn regarding the direction of keratin orientation. The specimens used were small pieces of human callus taken from selected feet. Through examination of serial sections it was found that optically the callus is composed of two different types of regularly alternating, elongated areas, one occurring beneath the surface grooves and the other beneath the surface ridges. In the grove areas the long axis of chain molecules of keratin is preferentially oriented parallel to the longitudinal axis of grooves. The single cornified cells in a narrow ridge around the sweat ducts revealed an annularly oriented keratin structure. The deduction was made that the lattice-like pattern in thickened epithelium formed by the groove areas and crossband region serves to increase the mechanical strength of the cornified epithelium, whereas the annular stricture around the sweat ducts gives support to the wall of the sweat duct and may assure its patency.

DIXON, MASTIN

(Continued from Page 62)

versatility as to technique of application, it is well suited for use with disturbed patients. No evidence of sensitization was encountered.

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References

1. Kline, P. R., and Caldwell, A: Treatment of Various Dermatoses with Topical Application of Panthenol. N. Y. State J. Med. 52:1141-1143. 1952.
2. Wenzeler, H., and Sauter, Jr.: Gynaecologie 12:124-126, 1946.
3. Gaglio, M.: Boll. Soc. Ital. Biol. Spar. 22:1100. 1946.
4. Combes, F. C., and Zuckerman, R.: Panthenol. Its Topical Use in Cutaneous Ulceration. J. Invest. Dermat. 16:379-381, 1951.
5. Welsh, A. L., and Ede, M.: Panthoderm: A Topical Therapeutic Adjuvant. Arch Dermat. & Syphil. 69:732-734, 1954.
6. Weiner, H: Sandpaper Technic for Skin Keratosis. J. Pod., Mar., 1955.

PODOPEDIATRIC CLINIC

(Continued from Page 84)

What is lupus erythematosus disseminatus?

Although this disease is usually considered as a dermatological problem, it nevertheless commonly involves other structures such as the joints, the heart, and the kidneys. It is a collagen disease. It displays a variety of skin manifestations ranging from a diffuse erythema to petechiae. A characteristic lesion is the so-called "butterfly eruption" which forms over the forehead and cheeks, and resembles in outline the shape of a butterfly. It sometimes produces joint pain and residual deformity which may be very difficult to distinguish from rheumatoid arthritis.

1424 Old York Rd., Abington, Pa.

ORGANIZATION NEWS

Secretaries of local, state, regional, affiliated, subsidary and other related organizations are invited to submit copy for this column.

CALIFORNIA

Southern Division

The Southern Division of the California Association of Chiropodists will hold its Sixth Annual Symposium on February 23 and 24, 1957, at the Statler Hotel in Los Angeles.

The program presented on February 23rd will include Diabetapodics, illustrated with slides and a movie; Shoe Therapy, illustrated with slides and suitable tools to use on shoes to alleviate shoe conditions; The Articulating Balanced Insole as Used With the Liss Concept of Foot Balance; The Non-Surgical Treatment of Inverted Toe Nails; The Use of Plastic Packing Material and Aeroplast Sterile Packing and The Use of Non-Adhering Dressings and Protective Prostheses Without the Need for Casting the Parts of the Foot. These topics will be presented by Dr. Leo N. Liss of San Francisco, Calif.

On February 24th Dr. Ray Kingland of Boise, Idaho, will discuss Combined Surgical and Orthopedic Problems of the Feet. This discourse will include: Philosophy of Surgery in Chiropody Practice; Large Wedge Shaped Scaphoids and Accessory Scaphoids as an Etiological Factor in Pronation; Consideration in Corrective Surgery of the First Metatarsal Phalangeal Joint.

The registration fee is $25.00 for N.A.C. member. Students are admitted free of charge. Early reservation is advised. Send checks to: Dr. Joseph M. Turchin, Scientific Chairman, 406 Wilshire Blvd., Santa Monica, Calif.

ILLINOIS

Zone III

A meeting of the Zone III branch of the Illinois Chiropody Society was held at the Jefferson Hotel in Peoria on December 2, 1956.

The following scientific program was presented: Dr. Paul Siebert of Springfield lectured on "Pelvic X-ray Technique and Evaluation" and Dr. Lyle R. McCain, Professor of Surgery at Illinois College of Chiropody, spoke on "Office Surgery."

AMERICAN COLLEGE OF FOOT ORTHOPEDISTS HOLDS MEETING

The first meeting of the Midwest Division of the American College of Foot Orthopedists was held on December 19, 1956, at the Congress Hotel, Chicago, Ill.

Dr. Custer presided at the meeting. The following officers were nominated: President, Dr. George C. Custer; Vice President, Dr. T. S. Hollingsworth; Secretary, Dr. Rosemary Becker and Treasurer, Dr. Harold J. Feder.

The following practitioners attended the meeting: Drs. Allan S. Cutler, Cicero, Ill.; L. B. Thompson, Kenosha, Wis.; Harold J. Feder, Chicago, Ill.; Jack Stern, Chicago, Ill.; Philip R. Brachman, Chicago, Ill.; Peter Varzos, Chicago, Ill.; T. S. Hollingsworth, Chicago, Ill.; and Rosemary Becker, Chicago, Ill.

NATIONAL BOARD OF CHIROPODY EXAMINERS INCORPORATED

On November 16, 1956 the National Board of Chiropody Examiners was incorporated in Kansas City, Missouri. Many State Boards will presently accept the National Chiropody Board examination in lieu of their own. Many other states are altering their laws to make this possible in their states.

The officers and members of the National Board of Chiropody Examiners are as follows:

Pres., G. R. Tobin, D.S.C., President of Idaho State Board of Chiropody Examiners, Twin Falls, Idaho

Pres.-Elect, M. Marcus, D.S.C., Member of Council on Education of National Association of Chiropodists, Miami, Florida

V. Pres., Pierce Nelson, D.S.C., Dean of California College of Chiropody, San Francisco, Calif.

Secy.-Treas., L. A. Hansen, D.S.C., Secy. of Missouri State Board of Chiropody, Kansas City, Mo.

Member, Gerard J. Casey, D.D.S., Secretary of National Board of Dental Examiners, Chicago, Ill.

Member, B. C. Egerter, D.S.C., President of Ohio College of Chiropody, Pittsburgh, Penna.

Member, Milton Gennis, D.S.C., Member of Council on Education of National Association of Chiropodists, Tulsa, Okla.

Member, P. H. Goulson, D.S.C., Member of Minnesota State Board of Chiropody Examiners and Registration, Minneapolis, Minn.

Member, Morris Haas, D.S.C., Secretary of New Mexico State Board of Chiropody Examiners, Albuquerque, New Mexico

Member, Rear Admiral Bartholomew W. Hogan, M.C., USN, Surgeon General, United States Navy, Washington, D. C.

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Member, R. N. Whitefield, M.D., Assistant Secretary, Mississippi State Board of Health, Jackson, Miss.

SCIENTIFIC COMMITTEE ANNOUNCES THE FIRST OF THE DREW RESEARCH AWARDS AND GRANTS-IN-AID

Dr. William F. Eads, Chairman of the Committee on Research, National Association of Chiropodists, announces that the committee has selected the following to receive initial payments for grants-in-aid from the Drew Research Awards funds.

1. A $400.00 grant-in-aid was made to Stuart B. Schwartz, a student at the Ohio College of Chiropody, to conduct research on "The Longitudinal Axis of the Conventional Shoe."

2. A $400.00 grant-in-aid was made to Peggie R. Heard, of the California College of Chiropody for "A Study of Foot Dimensions of the Feet of Children in the Seven to Eighteen Months Age Group."

3. $100.00 awards were also made to the shoe therapy directors of the above colleges for directing and guiding the work. The recipients of these awards are Dr. Leo N. Liss of the California College of Chiropody and Dr. D. D. Ressler of the Ohio College of Chiropody.

All recipients will receive the balance of their grants-in-aid when evidence of satisfactory progress is presented to the Committee on Research. Funds for these awards and grants-in-aid are made available to the

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National Association of Chiropodists' Committee on Research by the Irving Drew Shoe Co. $1,500.00 will be awarded annually.

Stuart B. Schwartz of Bayonne, New Jersey, attended elementary school in that area and high school in Spring Valley, N. Y. After attending Lycoming College in Williamsport, Pennsylvania, he entered the University of the State of New York where he received the degree of Associate in Arts and Sciences. He is now in his senior year at the Ohio College of Chiropody.

Peggie R. Heard of Cameron, Texas, graduated from the O. J. Thomas High School and the Prairie View A. & M. College in Texas in 1950. The next two years were spent teaching in an elementary school. In 1952 she enrolled in the California College of Chiropody.

Members of the N.A.C. in private practice have until April 15, 1957, to submit their papers for the two awards for the best papers on the practical application of shoes to foot problems. The best paper submitted will receive a $300.00 award and the next best a $200.00 award.

Entries were also received from the Temple University School of Chiropody, submitted by Earl Horowitz and Donald Redwin; Frank Carleton, D.S.C., Shoe Therapy Director, and from the Chicago College of Chiropody by Albert Kopp; Louis Diamond, D.S.C., Shoe Therapy Director.

The research committee wishes to thank all those who have extended their cooperation in aiding in this research award program, particularly the deans of the colleges and the shoe therapy directors.

PEPPERDINE COLLEGE AND THE BOARD OF DIRECTORS OF THE BILLIG CLINIC HOLD SYMPOSIUM ON FOOT PROBLEMS

A symposium on foot problems encountered in industry, schools, the home and sports was held at the Main Auditorium, Pepperdine College, Los Angeles, Calif., on January 12, 1956. The discussion was opened by Hugh M. Tiner, Ph.D., Presi-

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dent of the College.

The following program was presented: Introduction to the Subject: Harvey E. Billig, Jr., M.D., F.I.C.S., Professor of Physical Rehabilitation, Pepperdine College; Symposium Panel: Moderator, Vice Admiral Ross T. McIntire, M.D., U.S.N. (Retired), Executive Director International College of Surgeons; Members: James J. Morrow, M.D., Developmental Anatomical Defects and Variations; S. Austin Jones, M.D., Vascular Arterial; Albert Fields, M.D., Vascular Venous, Causalgia Phlebothrombosis and Thrombophlebitis; Evelyn Loewendahl, M.A., Ph.T., Developmental and Conditioned Patterns of Function; Laurence E. Morehouse, Ph.D., Foot Posture and Weight Bearing; Robert L. Brennan, D.S.C., Foot Pains; William L. Allen, M.D., Metabolic Factors; E. Forest Boyd, Jr., M.D., Gynecological and Pregnancy Considerations, and Harvey E. Billig, Jr., M.D., Orthopedics.

The symposium was concluded with an open forum period.

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METROPOLITAN LIFE INSURANCE COMPANY ISSUES NEW BOOKLET ON FOOT CARE

A new brochure on foot care has recently been issued by the Metropolitan Life Insurance Company, entitled "Treat Your Feet Right." This booklet is based on material prepared by Mr. Gilbert Hollander, Executive Secretary of the Podiatry Society of the State of New York. This announcement is made by Dr. Irving L. Marks, President, and Dr. Benjamin C. Mullens, Director of Public Information of the Society.

Mr. Hollander participated in several discussions with officials of the Metropolitan Life Insurance Company to stress the fact that while all their other health material constantly emphasized the need for specialized care, the previous pamphlets on foot care neglected specific mention of the important role of the foot specialist. Recognition of foot care as a distinct entity in the literature issued by the Metropolitan Life Insurance Company, a major force in health care in the country, is of great significance.

In a letter addressed to Mr. Hollander, Dr. W. P. Shepard, Vice President in Charge of the Health and Welfare Division of the Metropolitan states, "This particular booklet was especially prepared for use with employees in business concerns covered by our group-insured contracts." The booklet highlights the profession by specifically urging the readers to, "Consult the Foot Doctor."

Distribution of the booklet will be done nationally through the rack services of various industrial and commercial firms. Some practitioners have reported that employees of the General Motors Corporation and R. H. Macy have brought the pamphlet to them.

Sample copies of this brochure may be secured by writing to Mr. Gilbert Hollander at the Podiatry Society of the State of New York, Henry Hudson Hotel, 353 W. 57th St., New York 19, N. Y.

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DEATHS REPORTED

DR. CHARLES O. TAPP
Chicago, Ill.

Dr. Charles O. Tapp, born in Madisonville, Kentucky, honor student and graduate of the class of 1923 of Illinois College of Chiropody, passed away on December 12, 1956, in Leesburg, Fla. Dr. Tapp practiced on the far North Side of Chicago.

DR. D. L. CAVINESS
Chico, Calif.

DR. EDWIN L. MACKAY
Ft. Worth, Texas

Dr. Edwin L. Mackay, who operated a clinic at 717 N. Bailey, passed away on December 29, 1956. Dr. Mackay had been practicing chiropody in Fort Worth since 1950. He is survived by his wife, three sons and a daughter, all of Fort Worth.

DR. HARRY B. ULANET
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DR. HOWARD P. WINGERT
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1327 North Clark Street
Chicago, Ill.

New York College of Podiatry
53 East 124th Street
New York, N. Y.

Ohio College of Chiropody
2057 Cornell Road
Cleveland, Ohio

Temple University, School of Chiropody
1810 Spring Garden Street
Philadelphia, Pa.

LEGAL AND LEGISLATIVE

Chiropodist's Attempt to Win Back State License Overruled

A chiropodist who left the state in which he practiced failed to renew annually his license. His license was cancelled by the board in 1942. His attempt to regain his license in 1954 was unsuccessful. He instituted court action to have the State Chiropody Board ordered to return his license. The petition was overruled by the court.

Scopel, plaintiff, vs. Oklahoma State Board of Chiropody, defendants, District Court, Oklahoma County, Oklahoma, Dec. 1956.

Ruling Outlines Right to Practice Fully in New York

As the result of meetings with the State Education Department, the right of the New York podiatrists to treat the foot fully was outlined. The new interpretation states: (1) a podiatrist may use injections (subcutaneous, intramuscular, intravenous, antibiotic therapy); (2) in connection with skin and allergic conditions, he may do such things as sensitivity tests, superficial roentgen therapy, tetanus antitoxin; (3) he may diagnose injuries of the foot by use of x-ray to include the ankle and lower three inches of the leg; (4) necessary laboratory work.

The opinion concludes with the statement that the podiatrists "may use the treatments so listed in accordance with the statute when such treatments are directed to conditions of the foot."

MOOD ELEVATORS

Contributions to this column are more than welcome. In fact it depends upon them.

A.O.P.

The trouble with growing old is that you can feel your corns but you can't feel your oats.

—o—

Ain't it the truth?

Medicine is the only profession that labors incessantly to destroy the reason for its own existence.

—o—

Sometimes a chip on the shoulder turns out to be just a bark.

—o—

"Well, Chief," said the doctor's associate, "that was quite a session you had with that patient."

"Yes," said the doctor, wiping his forehead, "I think she was vaccinated with a phonograph needle."

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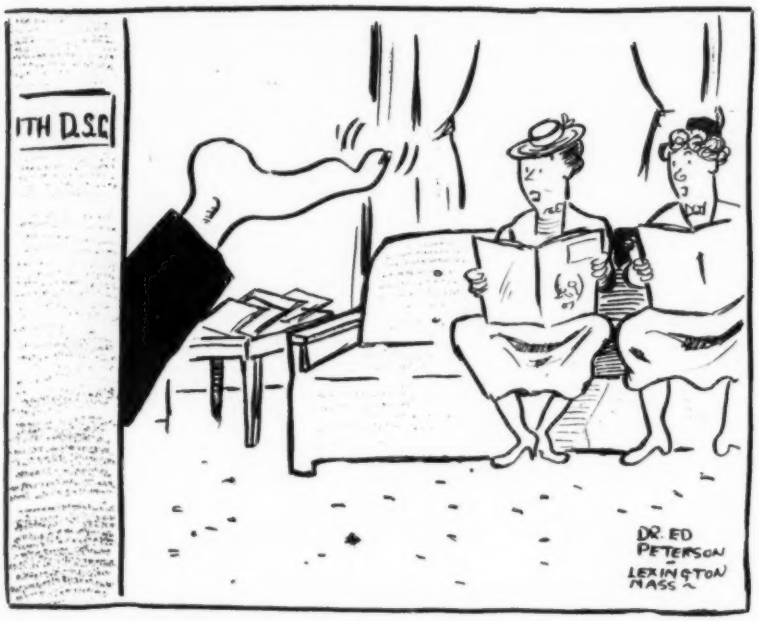

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"LIFE'S FOUNDATION — YOUR BABY'S FEET" is an outstanding and comprehensive booklet on the growth and care of children's feet. Written for the layman, it is concise, cleverly illustrated and will prove valuable especially to the parents of young children. Many Chiropodists have received a copy of this booklet and have ordered them in quantity. For those of you who have not ordered and for those who wish to reorder, please clip the order blank below and mail with your check for your supply.

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"Lawdy, Boss," chuckled the waiter, "I'm jes' as ig'orant as you is. I can't read neither."

— o —

The frosty-haired old preacher was sorely perplexed. He loved his beaten-up little church and he wanted mightily to make it attractive to his parishioners but there was no money. One day a friend passed by. The preacher told him his trouble.

"Well," said his friend, looking around the shabby building, "you could at least do a fresco job on that recess back of the pulpit. That would freshen things up a bit. Here, take this $5 bill and see what you can do."

A Sunday went by, during which a sheet hung over the recess. Came the next one and the old preacher proudly made an announcement.

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— o —

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THE WM. J. STICKEL ANNUAL AWARDS For RESEARCH IN CHIROPODY for 1957

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Members who desire to submit papers should make application on a form which can be obtained from the Secretary.

Research papers on any subject in the field of Chiropody may be offered. The final date on which papers will be accepted is April 15, 1957.

See Rules and Pertinent Information, J.N.A.C. Volume 46, Number 11, page 767, November, 1956.

CONVENTION DATES AND MEETING NOTICES

NATIONAL ASSOCIATION OF CHIROPODISTS
Chicago, Ill., August 14-21, 1957
Drake Hotel

NEW YORK STATE PODIATRY SOCIETY
Foot Care Conference
New York, N. Y., February 22-24, 1957
Barbizon Plaza Hotel

ALPHA GAMMA KAPPA FRATERNITY
National Convention
Chicago, Ill., March 14, 1957
Hamilton Hotel

REGION FIVE
Chicago, Ill., March 15-17, 1957
Morrison Hotel

REGION THREE
Atlantic City, N. J., April 25-28, 1957
Ambassador Hotel

REGION SIX
St. Louis, Mo., May 3-5, 1957
Hotel Statler

REGION SEVEN
Portland, Oregon, May 2-5, 1957
Heathman Hotel

REGION 12
Western Chiropody Conference
San Francisco, Cal., May 30-June 1, 1957
Sheraton-Plaza Hotel

SOUTHWESTERN CHIROPODY CONGRESS
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Shamrock-Hilton Hotel

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Boston, Mass., September 13-15, 1957
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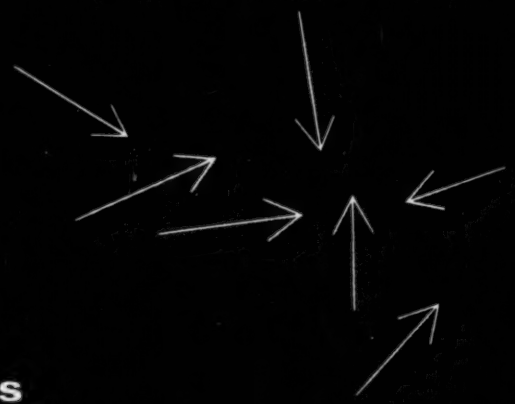

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